



# Temporary Prevention of Significant Deterioration (PSD) Permit

Permit No: **TP-B-XXXX**

Date Issued: **October XX, 2004**

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This certifies that:

**Northeast Utilities**

**Public Service Company of New Hampshire**

**780 North Commercial Street**

**Manchester, NH 03101**

has been granted a Temporary PSD Permit for the following facility and location:

**Public Service of New Hampshire**

**Schiller Station**

**400 Gosling Road**

**Portsmouth, NH**

**AFS Point Source Number – 3301500012**

Public Service of New Hampshire has been granted a Joint **Federal Prevention of Significant Deterioration (PSD) Permit and a State of New Hampshire Temporary Permit** for a 50 MW Wood-Fired Boiler with coal firing capability.

New Hampshire has EPA-approved procedures to ensure new construction or modifications of stationary sources do not violate control strategies or interfere with attainment or maintenance standards. These procedures authorize the DES to regulate significant increases for all criteria and regulated pollutants.

The joint PSD/Temporary permit is for a facility which emits air pollutants into the ambient air as set forth in equipment registration forms (ARD 1-6), filed with this Division under the date of **January 30, 2004** in accordance with RSA 125-C of the New Hampshire Laws. The PSD provisions of this permit are effective indefinitely or until such time that the facility applies and receives a Title V Operating Permit or a PSD Permit that modifies the terms and conditions of this permit. The Temporary provisions of this permit are valid until **April 31, 2006**. Request for temporary permit provision renewal prior to the expiration of the Temporary provisions of this permit is subject to Division requirements and must be accompanied by the appropriate permit application forms.

## SEE ATTACHED SHEETS FOR ADDITIONAL PERMIT CONDITIONS

The owner or operator of the devices covered by this permit shall submit a written request for a permit amendment to the Director at least 90 days prior to the implementation of any proposed change to the physical structure or operation of the devices covered by this permit which increases the amount of a specific air pollutant emitted by such devices or which results in the emission of any additional air pollutant. The change shall not take place until a new permit application is submitted and acted upon by the Director pursuant to Env-A 600.

Any permit deviation, which results in emissions greater than those stipulated in this permit, must be reported to the Division within 24 hours of the occurrence.

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Robert R. Scott  
Director  
Air Resources Division

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## ABBREVIATIONS

AAL	Ambient Air Limit
AP-42	Compilation of Air Pollutant Emission Factors
ARD	Air Resources Division
ASTM	American Society for Testing and Materials
ATS	Allowance Tracking System
BACT	Best Available Control Technology
BHP (or bhp)	Brake Horse Power
BTU	British Thermal Units
CAA	Clean Air Act, 42 U.S.C. § 7401, et seq.
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstracts Service
CEMS (or CMS)	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CNG	Compressed Natural Gas
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
COMS	Continuous Opacity Monitoring System
DER	Discrete Emission Reduction
Env-A	New Hampshire Code of Administrative Rules – Air Resources Division
Env-Wm	New Hampshire Code of Administrative Rules – Waste Management Division
ECS	Emission Control System
ERC	Emission Reduction Credit
ETS	Emissions Tracking System
FR	Federal Register
HAP	Hazardous Air Pollutant
HHV	High Heat Value
HCl	Hydrochloric acid
Hr	Hour
kGal	1,000 gallons
kscfm	1,000 standard cubic feet per minute
KVDC	Kilovolt Direct Current
KW	Kilowatt
LAER	Lowest Achievable Emission Rate
Lb/hr	Pounds per hour
LNB	Low NO <sub>x</sub> Burner
LNG	Liquid Natural Gas
LPG	Liquid Petroleum Gas (Propane)
MACT	Maximum Achievable Control Technology
mg/L	Milligrams per liter
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
MMCF	Million Cubic Feet
MW	Megawatt
NAAQS	National Ambient Air Quality Standard
NATS	NO <sub>x</sub> Allowance Tracking System

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## ABBREVIATIONS (cont.)

NESHAPs	National Emissions Standards for Hazardous Air Pollutants
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NG	Natural Gas
NHDES (or DES)	New Hampshire Department of Environmental Services
NMOC	Nonmethane Organic Compound
NO <sub>x</sub>	Oxides of Nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PCB	Polychlorinated biphenyls
PE	Potential Emission
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter less than 10 microns diameter
ppm	part per million
ppmv	part per million by volume
PSD	Prevention of Significant Deterioration
PSI	Pounds per Square Inch
PTE	Potential to Emit
PUC	Public Utilities Commission
RACT	Reasonably Available Control Technology
RTAP	Regulated Toxic Air Pollutant
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
T-12M	Tons during any consecutive 12-month period
TAP	Toxic Air Pollutant
TSP	Total Suspended Particulate Matter
TPY	Tons per Year
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

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## Facility Specific Temporary/PSD Permit Conditions

### I. Facility Description of Operations

Schiller Station (Schiller) is a 153 MW fossil fuel-fired electric generating facility located in Portsmouth, New Hampshire, owned and operated by Public Service of New Hampshire (PSNH), a subsidiary of Northeast Utilities. The facility is comprised of three utility boilers, one combustion turbine operating as a load shaving unit, an emergency generator, a primary coal crusher, and various insignificant or exempt activities.

### II. Project Description

PSNH is proposing to replace/repower the existing Unit #3 50 MW coal-fired boiler at Schiller Station with a new, 50 MW wood-fired fluidized bed boiler (referred to herein as the NWPP Boiler). The existing electrical generating equipment (turbine and generator) on Unit #5 will be utilized on the NWPP Boiler.

The fuel for the NWPP Boiler will be primarily whole tree wood chips, untreated byproducts or residue from forest products, residue from forest products manufacturing operations or from construction, stump grindings and ground pallets. The NWPP Boiler will also be capable of burning coal as a backup fuel in the event that PSNH's wood fuel becomes uneconomical or subject to a disruption in supply.

Air pollution control equipment installed and operated on the NWPP Boiler will include a selective non-catalytic reduction (SNCR) system for NO<sub>x</sub> control, limestone injection system to control acid gases, and a fabric filter for the control of particulate matter. The NWPP Boiler will also be equipped with continuous emission monitors (CEMs) to continuously measure and record emissions of PM, CO, NO<sub>x</sub>, opacity, as well as specific operational parameters.

Ancillary projects associated with the installation of the NWPP Boiler will include the construction of a wood fuel handling and storage yard and the installation of a new secondary coal crusher and conveyor system.

The replacement/repowering of the Unit #5 boiler with the NWPP Boiler will result in emissions decreases of the criteria pollutants PM, PM<sub>10</sub>, NO<sub>x</sub>, and SO<sub>2</sub>. However, the boiler replacement will result in increased emissions of CO and VOCs. Table 1 below summarizes the net emissions increases/decreases resulting from the replacement/repowering of the Unit #5 boiler with the NWPP Boiler.

**Table 1 - Prevention of Significant Deterioration (PSD) Applicability Thresholds  
(All Values in Tons Per Year)**

	TSP	PM10	SO2	NOx	CO	VOC
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NWPP Boiler Emissions – Proposed Permit Limits	32	32	334	237	315	16
Existing Unit #5 Emissions – Baseline Annual Average <sup>1</sup>	113	75	1,951	595	181	5
Net Emissions Increase/(Decrease) from Unit #5 Replacement	(81)	(43)	(1,617)	(358)	135	11
PSD Significant Modification Threshold	25	15	40	25	100	40
PSD Significant Modification Threshold Triggered (Yes/No)?	No	No	No	No	Yes	No

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### III. Applicability of Federal Regulations

#### A. Federal Prevention of Significant Deterioration (PSD) Requirements

As shown in Table 1 above, the NWPP Boiler will emit CO in excess of major source PSD significant modification thresholds, and therefore is subject to PSD review and requires a PSD permit. The PSD regulations require that Best Available Control Technology (BACT) be used for this boiler to minimize CO emissions.

#### B. Federal Maximum Available Control Technology (MACT) Requirements

On February 26, 2004, the USEPA Administrator signed as final, a standard regulating the emissions of hazardous air pollutants from industrial, commercial, and institutional boilers. This standard, 40 CFR Part 63 Subpart DDDDD, *Industrial/Commercial/Institutional Boilers and Process Heaters*, has not yet been published in the Federal Register.

Because no published MACT standard currently exists for electric utility steam generating units, the NWPP Boiler is subject to a case-by-case MACT determination under Section 112(g) of the Clean Air Act. The MACT approval for the NWPP Boiler reflects the permit requirements of Subpart DDDDD in accordance with 40 CFR 63.44(a).

#### C. New Source Performance Standards (NSPS) for Electric Utility Steam Generating Units

The proposed NWPP Boiler will be subject to the NSPS, 40 CFR 60 Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978 (“Subpart Da”). Subpart Da affects electric steam generating units with a design capacity greater than 250 MMBTU/hr constructed after September 18, 1978. DES is delegated by EPA to enforce Subpart Da as it pertains to electric utility steam generating units.

#### D. NSPS Standards for Coal Preparation Plants

Coal for the NWPP Boiler will be processed and stored on-site. The secondary coal crusher is subject to the NSPS, 40 CFR 60 Subpart Y, *Standards of Performance for Coal Preparation Plants* (“Subpart Y”). Subpart Y requires an initial compliance test for opacity of coal dust emissions from the crusher. DES is delegated by EPA to enforce Subpart Y as it pertains to coal

<sup>1</sup> The “Baseline Annual Average” emission rate for the existing Unit #5 is the annual emission rate as averaged over the two-year period from September 2001 to August 2003. This value is used to calculate net emissions changes for purposes of determining applicability of PSD requirements.

preparation plants.

#### IV. Air Quality Impact Analysis

As demonstrated by the air quality impact analysis and additional analyses required by state and federal regulations, including cavity analysis, toxic air pollutant impact assessment, and Class I impact analyses, the NWPP Boiler will not cause or contribute to violations of NAAQS or PSD increments.

#### V. Permitted Activities

In accordance with all of the applicable requirements identified in this permit, PSNH is authorized to operate the NWPP Boiler and all associated ancillary equipment and processes identified in Sections VI through IX within the terms and conditions specified in this Permit.

#### VI. Significant Activities Identification and Stack Criteria

##### A. Significant Activity Identification

The activities identified in Table 2 are subject to and regulated by this Temporary PSD Permit:

Table 2 – Significant Activity Identification			
Emission Unit Number	Description of Emission Unit	Maximum Capacity	Maximum Operating Conditions
SR5	NWPP Boiler – Circulating Fluidized Bed Boiler with Overbed Feed	<p>720 MMBTU/hr gross heat input while firing wood<sup>2</sup>; or 635 MMBTU/hr gross heat input while firing bituminous coal (with a maximum sulfur content of 1.5 lb/MMBTU, and a maximum sulfur content of 1.0 lb/MMBTU as averaged over any 3-month consecutive period).</p> <p>The Start-up Burner System shall consist of a duct burner and two overhead firing burners with a combined maximum gross input rating of 144 million British Thermal Units per hour (MMBTU/hr).</p> <p>Fuel firing in the Start-up Burner System shall be limited to the combustion of natural gas.</p>	<p>a. Maximum fuel consumption rate of wood shall be limited to 76.5 tons per hour, not to exceed 670,140 tons during any consecutive 12-month period<sup>3</sup>.</p> <p>b. Maximum fuel consumption rate of bituminous coal shall be limited to 23.3 tons per hour, not to exceed 204,108 tons during any consecutive 12-month period.<sup>4</sup></p> <p>c. The combined combustion of wood and coal in the NWPP Boiler shall not exceed 6,307,200 MMBTU during any 12 consecutive month period.</p> <p>d. Maximum fuel consumption rate of natural gas for the Start-up Burner System shall not exceed 144,000 cubic feet per hour and</p>

<sup>2</sup> For the purposes of this permit, “wood” is defined as whole tree chips, stump grindings, ground pallets, untreated byproducts or residue from forest products manufacturing operations or from construction. Wood does not include pressure treated wood products, wood from demolitions, or wood products containing glues or binders (including but not limited to plywood, particle board, oriented strand board, or similar products).

<sup>3</sup> The heating value of wood is assumed to be 4,274 BTU/lb at 50% moisture. The maximum fuel consumption limits of the unit may be adjusted based on the actual heat content and moisture content of the fuel burned.

<sup>4</sup> The heating value of bituminous coal is assumed to be 12,700 BTU/lb. The maximum fuel consumption limits of the unit may be adjusted based on the actual heat content of the fuel burned.

Table 2 – Significant Activity Identification			
Emission Unit Number	Description of Emission Unit	Maximum Capacity	Maximum Operating Conditions
			1,261 million cubic feet during any consecutive 12-month period. <sup>5</sup>
SRCC2	Secondary Coal Crusher	700,000 lb coal/hour	Maximum coal processing rate shall be limited to 350 tons per hour.

## B. Stack Criteria

The stack for the NWPP Boiler shall discharge vertically without obstruction (including rain caps) and meet the following criteria:

Table 3 – Stack Criteria				
Stack Number	Emission Unit Number	Emission Unit Description	Minimum Stack Height (Feet) Above Ground Level	Maximum Inside Stack Diameter (Feet)
STSR5	SR5	NWPP Boiler	226	10.5

Changes to the state-only requirements pertaining to stack parameters (set forth in this permit), shall be permitted only when an air quality impact analysis which meets the criteria of Env-A 606 is performed either by the facility or the New Hampshire Department of Environmental Services, Air Resources Division (if requested by facility in writing) in accordance with the “DES-ARD Procedure for Air Quality Impact Modeling.” All air modeling data shall be kept on file at the facility for review by the DES upon request.

## VII. Pollution Control Equipment/Method Identification

The devices and/or processes identified in Table 4 are considered pollution control equipment or techniques for each identified emissions unit:

Table 4 – Pollution Control Equipment/Method Identification		
Pollution Control Equipment Number	Description of Equipment/Method	Emission Unit Number
SR5-PC1	Selective Non-Catalytic Reduction (SNCR) System	SR5
SR5-PC2	Limestone Injection System	SR5
SR5-PC3	Baghouse (Fabric Filter)	SR5

<sup>5</sup> The heating value of natural gas is assumed to be 1000 BTU/ft<sup>3</sup>. The maximum fuel consumption limits of the unit may be adjusted based on the actual heat content of the fuel burned.

<sup>7</sup> To comply with this provision, PSNH shall use Best Management Practices to manage and minimize fugitive coal dust. See the Best Management Practice policies established by PSNH in their standard operating procedures for the cold weather coal bunkering, dust suppression operation, duties of person on dock, and coal unloading operational checks.

Table 4 – Pollution Control Equipment/Method Identification		
Pollution Control Equipment Number	Description of Equipment/Method	Emission Unit Number
SR5-PC4	Good Combustion Practices	SR5
SRCC2-PC16	Best Management Practices for fugitive dust	SRCC2

## VIII. Applicable Requirements

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### A. Operational and Emission Limitations

PSNH shall be subject to the operational and emission limitations identified in Table 5 below.

Table 5 –Operational and Emission Limitations			
Item #	Applicable Emission Unit	Applicable Requirement	Regulatory Basis
1.	Facility-wide	PSNH shall prevent, abate, and control fugitive dust emissions, including fugitive emissions, including but not limited to wood dust and coal dust <sup>7</sup> . During coal handling, PSNH shall use best management practices, which may include the use of covers on the exposed, nonworking areas of the coal piles and the use of dust suppressants.	Env-A 1002.04 Fugitive Dust
2.	Facility-wide	All devices or processes, subject to RSA 125-I and Env-A 1400, shall comply with Env-A 1400 ( <i>Regulated Toxic Air Pollutants</i> ).	Env-A 1403
3.	Facility-wide	Documentation for the demonstration of compliance shall be retained at the facility and shall be made available to DES for inspection upon request.	Env-A 1404.01(d)
4.	Facility-wide	a. The owner of a new or modified device or process requiring a permit under this chapter shall submit an application for a temporary permit in accordance with Env-A 607.03. b. Pursuant to RSA 125-I:5,I, the owner shall not operate the device or process until a Temporary Permit is issued.	Env-A 1405.01
5.	Facility-wide	The owner of any device or process that emits an RTAP shall determine compliance with the AAL by using one of the methods provided in Env-A 1406.02, Env-A 1406.03, Env-A 1406.04, or Env-A 1406.05. Upon request, the owner of any device or process that emits an RTAP shall provide documentation of compliance with the AAL to DES.	Env-A 1406.01
6.	SR5	The sulfur content of gaseous fuels shall not exceed 15 grains of sulfur per 100 cubic feet of gas at standard temperature and pressure.	Env-A 1605.01 Sulfur Content for Gaseous Fuels
7.	SR5	For a coal-burning devices placed in operation after April 15, 1970: a. The sulfur content of coal shall not exceed 1.5 lb/MMBTU gross heat content; and b. The sulfur content of coal shall not exceed 1.0 lb/MMBTU gross heat content, averaged over any consecutive 3-month period.	Env-A 1606.01(b) Maximum Sulfur Content Allowable in Coal
8.	SR5	PSNH shall not cause or allow average opacity in excess of 10 percent over a 1-hour block average as measured and recorded by the Continuous Opacity	40 CFR 63.7500(a)(2)

**Table 5 –Operational and Emission Limitations**

Item #	Applicable Emission Unit	Applicable Requirement	Regulatory Basis
		Monitoring System (COMS). The COMS shall be installed, calibrated, and maintained in accordance with the specifications in Table 5, Item 31, Table 6, Item 12 and Table 7, Items 63 and 69.	
9.	SR5	No owner or operator shall cause or allow average opacity from fuel burning devices installed after May 13, 1970 in excess of 20 percent for any continuous 6-minute period in any 60-minute period.	Env-A 2003.02 Visible Emission Standard for Fuel Burning Devices
10.	SR5	<p>For steam generating units subject to 40 CFR 60, no more than one of the following 2 exemptions shall be taken:</p> <ul style="list-style-type: none"> <li>a. During periods of startup, shutdown and malfunction, average opacity shall be allowed to be in excess of 20 percent for one period of 6 continuous minutes in any 60 minute period; or</li> <li>b. During periods of normal operation, soot blowing, grate cleaning, and cleaning of fires, average opacity shall be allowed to be in excess of 20 percent but not more than 27 percent for one period of 6 continuous minutes in any 60 minute period.</li> </ul>	<p>Env-A 2003.04(a) Activities Exempt from Visible Emission Standards</p> <p>40 CFR 60.42a(b) NSPS for Opacity</p>
11.	SR5	<p>Exceedances of the opacity standard in Env-A 2003.02 shall not be considered violations if the source demonstrates to the division that such exceedances were the result of the adherence to good boiler operating practices which, in the long term, results in the most efficient or safe operation of the boiler.</p> <p>Examples of activities that may cause exceedances of the opacity standard that shall not be considered violations include the following:</p> <ul style="list-style-type: none"> <li>a. Continuous soot blowing of the entire boiler tube sections over regular time intervals as determined by the operator and in conformance with good boiler operating practice; and</li> <li>b. Cold startup of a boiler over a continuous period of time resulting in efficient heat-up and stabilization of its operation and the expeditious achievement of normal operation of the unit.</li> </ul>	<p>Env-A 2003.04(d) and Env-A 2003.04(e) Activities Exempt from Visible Emission Standards</p>
12.	SR5	Exceedances of the opacity standard in Env-A 2003.02 shall not be considered violations of this part if the source demonstrates to the division that such exceedances were the result of the occurrence of an unplanned incident in which the opacity exceedance was beyond the control of the operator and in response to such an incident, the operator took appropriate steps in conformance with good boiler operating practice to eliminate the excess opacity as quickly as possible.	2003.04(f) Activities Exempt from Visible Emission Standards
13.	SRCC2	On and after the date on which the performance test required to be conducted by 60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.	40 CFR 60.252(c) NSPS for Coal Preparation Plants
14.	SR5, SRCC2	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.	40 CFR 60.11(d)

**Table 5 –Operational and Emission Limitations**

Item #	Applicable Emission Unit	Applicable Requirement	Regulatory Basis
15.	SR5	<u>Emission Standards for PM and PM10</u>  PM and PM <sub>10</sub> emissions shall be limited to (regardless of fuel type): a. 0.025 lb/MMBtu of heat input at all times <sup>8</sup> ; b. 0.01 lb/MMBTU of heat input based on a 24-hour calendar day average; c. 7.2 lb/hr; and d. 31.5 tons per consecutive 12-month period. e. Pursuant to 40 CFR 60.46a (c), the emission standards in 40 CFR 60.42a (and contained in footnote 6, item 1 of this permit) apply at all times except during periods of startup, shutdown or malfunction.	40 CFR 63.7500(a)(1)  40 CFR 60.42a (a)(1) and (2), 40 CFR 60.46a (a) and (c)  Env-A 2003.08
16.	SR5	<u>Emission Standards for SO<sub>2</sub>:</u>  SO <sub>2</sub> emissions shall be limited to: a. 0.12 lb/MMBTU of heat input while firing coal; b. 0.02 lb/MMBTU of heat input while firing wood; c. 76.2 lb/hr; and d. 333.8 tons per consecutive 12-month period. e. The limits in (a) and (b) are based on a 24-hour calendar day average <sup>9</sup> . f. Pursuant to 40 CFR 60.46a(c), the SO <sub>2</sub> emission standards in 40 CFR 60.43a(a) (and contained in footnote 7, item 1 of this permit) apply at all times except during periods of startup, shutdown or when both emergency conditions, as defined according to 40 CFR 60.41a, exist and the procedures of 40 CFR 60.46a (d) are implemented.	40 CFR 60.43a (a) and (g) NSPS for SO <sub>2</sub>  Permit Application #FY04-0331
17.	SR5	<u>Emission Standards for NOx</u>  NOx emissions shall be limited to (regardless of fuel type): a. 0.075 lb/MMBTU of heat input based on a 24-hour calendar day average <sup>10</sup> ; b. 54.0 lb/hr; and c. 236.5 tons per consecutive 12-month period. d. Pursuant to 40 CFR 60.46a (c), the emission standards in 40 CFR 60.44a (a) and (d)(1) (and contained in footnote 8, item 1 of this permit) apply at all times except during periods of startup, shutdown, or malfunction.	Env-A 1211.15 NOx Emission Limitation  40 CFR 60.44a (a) (1) and (2) and (d)(1) and 40 CFR 60.46a (b) and (c) NSPS for NOx

- <sup>8</sup> This Condition has been streamlined to cover various state and federal air regulations. Compliance with the 0.025 lb/MMBTU PM emission limit will also ensure compliance with:
- The 0.03 lb/MMBTU (and 1% of the potential combustion concentration) 30-day rolling average emission limits contained in 40 CFR 60, Subpart Da, *New Source Performance Standards (NSPS) for Electric Utility Steam Generating Units for Which Construction, Modification, or Reconstruction is Commenced After September 18, 1978; and*
  - The 0.1 lb/MMBTU emission limit contained in Env-A 2003.08 *Particulate Emission Standards for Fuel Burning Devices Installed on or After January 1, 1985.*
- <sup>9</sup> This Condition has been streamlined to cover various state and federal air regulations. Compliance with the SO<sub>2</sub> emission limits of 0.12 lb/MMBTU during coal firing and 0.02 lb/MMBTU during wood firing will also ensure compliance with:
- 40 CFR 60.43a (a) and (g) (NSPS Subpart Da) limits SO<sub>2</sub> emissions to 1.20 lb/MMBTU and 10 percent of the potential combustion concentration (90 percent reduction), OR 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 0.60 lb/MMBtu heat input. Compliance to be determined on a 30-day rolling average basis.
- <sup>10</sup> This Condition has been streamlined to cover various state and federal air regulations. Compliance with the 0.075 lb/MMBTU NOx emission limit will also ensure compliance with:
- 40 CFR 60.44a (a) (1) and (2) and (d)(1) (NSPS Subpart Da) limit NOx emissions to 0.6 lb/MMBTU and 1.6 lb/megawatt-hour gross energy output. Compliance to be determined on a 30-day rolling average basis.

**Table 5 –Operational and Emission Limitations**

<b>Item #</b>	<b>Applicable Emission Unit</b>	<b>Applicable Requirement</b>	<b>Regulatory Basis</b>
18.	SR5	If this device has excess emissions <sup>11</sup> of SO <sub>2</sub> or NO <sub>x</sub> in any calendar year, then PSNH shall perform the following as required by 40 CFR 77:  a. Submit a proposed offset plan; b. Pay without demand the penalty including interest on that penalty; and c. Comply with an approved offset plan.	40 CFR 72.9 (e) Excess Emission Requirements
19.	SR5	<u>Emission Standards for CO</u>  CO emissions shall be limited to (regardless of fuel type): a. 0.10 lb/MMBTU of heat input <sup>12</sup> based on a 24-hour block average; a. 72.0 lb/hr; and b. 315.4 tons per consecutive 12-month period.	40 CFR 52.21(j)(3)
20.	SR5	<u>Emission Standards for VOCs</u>  VOC emissions shall be limited to (regardless of fuel type): a. 0.005 lb/MMBTU of heat input based on a 24-hour calendar day average; b. 3.6 lb/hr; and c. 15.8 tons per consecutive 12-month period.	Permit Application #FY04-0331
21.	SR5	<u>Emission Standard for Hydrogen Chloride</u>  PSNH shall not cause or allow emissions of hydrogen chloride (HCl) in excess of 0.02 lb/MMBtu of heat input <sup>13</sup> , regardless of fuel type.	40 CFR 63.7500(a)(1)
22.	SR5	<u>Emission Standard for Mercury</u>  PSNH shall not cause or allow emissions of mercury in excess of 0.000003 lb/MMBtu of heat input <sup>14</sup> , regardless of fuel type.	40 CFR 63.7500(a)(1)
23.	SR5	PSNH shall comply with the applicable Federal Acid Rain Program provisions.	40 CFR 72, 73, 76, and 77 Acid Rain Provisions
24.	SR5	a. The secondary coal crusher shall be fully enclosed in an aboveground building to reduce fugitive emissions. b. If PSNH observes visible emissions from the coal crusher enclosure or observes breaks in the structure of the enclosure, PSNH shall take appropriate actions to control fugitive emissions. c. PSNH shall use best management practices to control fugitive particulate emissions from the process equipment, unloading area, and the coal piles.	Env-A 1002.04 Fugitive Dust

<sup>11</sup> Pursuant to 40 CFR 72.2, “excess emissions” are defined as any tonnage of SO<sub>2</sub> emitted in a calendar year that exceeds the Federal Acid Rain emission limitation and as any tonnage of NO<sub>x</sub> emitted in a calendar year that exceeds the annual tonnage equivalent of the Federal NO<sub>x</sub> Acid Rain emission limitation taking into account the unit’s heat input for the year.

<sup>12</sup> This Condition has been streamlined to cover various state and federal air regulations. The CO emission limit of 0.10 lb/MMBTU is based on achieving Best Available Control Technology (BACT) emission levels as required under the federal Prevention of Significant Deterioration (PSD) Program requirements contained in 40 CFR 52.21(j)(3). Compliance with the CO BACT emission limit will also ensure compliance with:

1. 40 CFR 63.7500(a)(1) (MACT Subpart DDDDD) limits CO emissions to 400 parts per million by volume (ppm<sub>v</sub>) on a dry basis corrected to 7% oxygen in any consecutive 30-day period. This is equivalent to 0.40 lb/MMBTU for wood firing and 0.42 lb/MMBTU for coal firing.

<sup>13</sup> Compliance with these standards to be determined through performance stack testing.

<sup>14</sup> Compliance with these standards to be determined through performance stack testing.

**Table 5 –Operational and Emission Limitations**

Item #	Applicable Emission Unit	Applicable Requirement	Regulatory Basis
25.	SR5	<p><u>Accidental Release Program Requirements</u></p> <p>The quantities of regulated chemicals stored at the facility are less than the applicable threshold quantities established in 40 CFR 68.130. The facility is subject to the Purpose and General Duty clause of the 1990 Clean Air Act, Section 112(r)(1). General Duty includes the following responsibilities:</p> <ol style="list-style-type: none"> <li>Identify potential hazards which result from such releases using appropriate hazard assessment techniques;</li> <li>Design and maintain a safe facility;</li> <li>Take steps necessary to prevent releases; and</li> <li>Minimize the consequences of accidental releases that do occur.</li> </ol>	40 CFR 68 and 1990 CAAA Section 112(r)(1) Accidental Release Program Requirements
26.	SR5	PSNH shall comply with the asbestos requirements of Env-A 1800 and 40 CFR 61.145 during demolition and/or renovation.	40 CFR 61 Subpart M, Env-A 504.01(d) and Env-A 1800 Asbestos Management and Control
27.	SR5-PC1	<p><u>Operating Conditions for the SNCR System</u></p> <p>To achieve the NO<sub>x</sub> emission requirements specified in this permit, PSNH shall maintain and operate the SNCR.</p> <ol style="list-style-type: none"> <li>The CEMS shall be used to determine compliance with the NO<sub>x</sub> emissions rate at the stack outlet.</li> <li>The SNCR system uses a urea solution to reduce NO<sub>x</sub> emissions.</li> <li>Ammonia slip from the SNCR system shall not exceed 10 ppmvd @ 7% O<sub>2</sub>. Ammonia slip shall be measured using a CEM.</li> <li>The normal injection rate of urea shall be established during the start-up period. PSNH may vary the injection rate of urea in a manner that is adequate to meet the NO<sub>x</sub> emission limitations.</li> <li>Within 180 days of initial startup of the SNCR system, PSNH shall submit for DES approval an alternate method for monitoring ammonia slip in the event that the ammonia CEM goes out of service.</li> </ol>	
28.	SR5	<p><u>General Compliance Requirements</u></p> <p>PSNH:</p> <ol style="list-style-type: none"> <li>Shall comply with the 40 CFR 63 Subpart DDDDD emission limits (including operating limits) and work practice standards at all times, except during periods of startup shutdown or malfunction;</li> <li>Must always operate and maintain the affected source, including air pollution control and monitoring equipment in a manner consistent with good air pollution control practices;</li> <li>May demonstrate compliance with applicable emissions rates for hydrogen chloride (HCl), and/or mercury using fuel analysis if the emission rates calculated according to Table 6 Item 11 are less than the applicable emission limit. Otherwise, PSNH shall demonstrate compliance using performance testing;</li> <li>Demonstrates compliance with any applicable emission limit through</li> </ol>	40 CFR 63.6(e)(1)(i), 63.7505, 63.7510(g), 63.7540(a), & 63.7540(c)

**Table 5 –Operational and Emission Limitations**

Item #	Applicable Emission Unit	Applicable Requirement	Regulatory Basis
		<p>performance testing, a site-specific testing plan shall be developed according to Table 6, Item 7;</p> <ul style="list-style-type: none"> <li>e. Shall develop and implement a written Start-up, Shutdown, Malfunction Plan (SSMP) according to the specifications in Table 8, Item 4;</li> <li>f. Shall not operate the affected source above the applicable maximum operating limit or below the applicable minimum operating limits except during periods of start-up, shut down, or malfunction;</li> <li>g. Shall operate in accordance with the SSMP during periods of start-up, shut down, and malfunction;</li> <li>h. Operating limits of 40 CFR 63 Subpart DDDDD do not apply during performance tests;</li> <li>i. Operation of the affected source above established maximum or below the minimum operating limits shall constitute a deviation of established operating limits; and</li> <li>j. Shall demonstrate initial compliance with the emission limits and work practice standards no later than 180 days after startup of the affected source.</li> </ul>	
29.	SR5	<p><u>Operating Limits - Continuous Emission Monitoring System</u></p> <p>PSNH must install, calibrate, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide (CO) and diluent gas according to the following:</p> <ul style="list-style-type: none"> <li>a. PSNH shall install, calibrate, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide according to the procedures specified in Table 5, Item 29, Table 6, Item 12, and Table 7, Items 63 and 67.</li> <li>b. Each CEMS must be installed, calibrated, operated and maintained according to Performance Specification (PS) 4A of 40 CFR 60 Appendix B, and according to the site specific monitoring plan developed in accordance with Table 6, Item 12, and Table 8, Item 6;</li> <li>c. Install the sampling probe or other interface of the CMS at a measurement location such that the measurement is representative of control of the exhaust emissions (e.g. downstream of the last control device);</li> <li>d. Shall operate in accordance with the site-specific SSMP during periods of startup, shutdown, and malfunction;</li> <li>e. Conduct a performance evaluation for each CEMS must be conducted in accordance with the requirements in §63.8 and PS 4A of 40 CFR 60 Appendix B;</li> <li>f. Each CEMS must complete a minimum of one cycle of operation (sampling, analysis and data recording) for each successive 15-minute period;</li> <li>g. The CEMS data must be reduced in accordance with 40 CFR 63.8(g)(2); and</li> <li>h. PSNH shall develop and implement a written startup, shutdown, malfunction plan (SSMP) according to §63.6(e)(3) and Table 8, Item 4.</li> </ul>	<p>40 CFR 63.7500(a)(1), 63.7525(a), 63.7505(d), 63.7505(e), 63.7525(a), 63.6(e)(3), 63.8, &amp; 60.8</p>
30.	SR5	<p><u>Operating Limits - Solid Sorbent Injection System</u></p> <p>PSNH shall install, maintain, calibrate, and operate a solid sorbent injection system according to Table 7, Item 64. PSNH shall maintain the minimum sorbent injection rate at or above the operating levels established during the performance test according to Table 6, Item 13, and §63.7530(c). Minimum</p>	<p>40 CFR 63.7525(h), 63.7530(c), 63.7540(a)(9), &amp;</p>

**Table 5 –Operational and Emission Limitations**

Item #	Applicable Emission Unit	Applicable Requirement	Regulatory Basis
		<p>sorbent injection rate means 90% of the lowest test-run average sorbent flow rate measured according to Table 6, Item 13 during the most recent performance test demonstrating compliance with the applicable emissions limits for HCl and mercury.</p> <p>PSNH shall install, calibrate, operate, and maintain a device to measure the sorbent injection rate according to the following:</p> <ol style="list-style-type: none"> <li>Locate the device in a position that provides a representative measurement of the total sorbent injection rate;</li> <li>Install and calibrate the device in accordance with the manufacturer's procedures and specifications; and</li> <li>During each planned outage, calibrate the device in accordance with the manufacturer's specifications.</li> </ol>	63.7575
31.	SR5	<p><u>Operating Limits - Continuous Opacity Monitoring System</u></p> <p>To comply with the opacity emission limit specified in Table 5, Item 8, PSNH shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) according to the following:</p> <ol style="list-style-type: none"> <li>The COMS must be installed, operated, and maintained according to PS1 of 40 CFR part 60, Appendix B;</li> <li>Install the sampling probe or other interface of the CMS at a measurement location such that the measurement is representative of control of the exhaust emissions (e.g. downstream of the last control device);</li> <li>Shall operate in accordance with the site-specific SSMP during periods of startup, shutdown, and malfunction;</li> <li>Conduct a performance evaluation of each COMS according to the requirements on §63.8 and according to PS1 of 40 CFR part 60, Appendix B;</li> <li>Each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period;</li> <li>The COMS data must be reduced as specified in §63.8(g)(2);</li> <li>Procedures and acceptance criteria for operating and maintaining the COMS must be included in the site-specific monitoring plan, as specified in Table 8, Item 10, and Table 6, Item 12; and</li> <li>Operate and maintain the COMS in accordance with the site-specific monitoring plan as specified in Table 8, Items 8 and 10.</li> </ol>	40 CFR 60 appendix B, 63.7505(d), 63.7505(e), 63.7525(b), & 63.8(g)(2)
32.	SR5	<p><u>Operating Limits - Fuel Type/Mixture</u></p> <p>If PSNH elects to demonstrate compliance with the HCl and/or mercury emissions limits through fuel analysis, PSNH shall:</p> <ol style="list-style-type: none"> <li>Conduct fuel analyses according to Table 6, Items 9 and 10;</li> <li>Determine the fuel mixture that would result in the maximum chlorine and mercury fuel input during the initial performance test according to the specifications in Table 6, Item 9;</li> <li>Maintain the fuel type and/or fuel type mixture such that the HCl and mercury emission rates calculated according to the specifications in Table 6, Items 9 and 10 are less than the applicable emission limits specified in Table 5.</li> </ol>	40 CFR 63.7530(c), 63.7530(d)(3), & 63.7540(a)

## B. Initial Compliance Demonstration Requirements

PSNH shall demonstrate initial compliance with the conditions specified in Table 1 no later than 180 days after startup of the new affected source. PSNH shall perform the monitoring and/or testing indicated in Table 6 below:

Table 6: Initial Compliance Demonstration Requirements					
Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
1.	SR5	SO <sub>2</sub> and NO <sub>x</sub>	<p>a. Pursuant to 40 CFR 60.46a (e), after the initial performance test required under 40 CFR 60.8, PSNH shall determine compliance with the SO<sub>2</sub> emission limitations and percentage reduction requirements under 40 CFR 60.43a and NO<sub>x</sub> emission limitations under 40 CFR 60.44a based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for both SO<sub>2</sub> and NO<sub>x</sub> and a new percentage reduction for SO<sub>2</sub> are calculated to show compliance with the standards.</p> <p>b. Pursuant to 40 CFR 60.46a (f), for the initial performance test required pursuant to 40 CFR 60.8, PSNH shall determine compliance with the SO<sub>2</sub> emission limitations and percent reduction requirements under 40 CFR 60.43a and NO<sub>x</sub> emission limitations under 40 CFR 60.44a based on the average emission rates for the first 30 successive boiler operating days.</p> <p>c. PSNH shall schedule the initial performance test so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial startup of the facility.</p> <p>d. Pursuant to 40 CFR 60.46a (g), PSNH shall determine compliance by calculating the arithmetic average of all hourly emission rates for SO<sub>2</sub> and NO<sub>x</sub> for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction (NO<sub>x</sub> only), or emergency conditions (SO<sub>2</sub> only). Compliance with the percentage reduction requirement for SO<sub>2</sub> is determined based on the average inlet and average outlet SO<sub>2</sub></p>	For 30 successive boiler operating days and initial performance test within 60 days after achieving maximum production rate, but no later than 180 days after initial startup	<p>40 CFR 60.46a (e), (f), (g), and (h)</p> <p>Subpart Da requirements</p>

**Table 6: Initial Compliance Demonstration Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>emission rates for the 30 successive boiler operating days.</p> <p>e. Pursuant to 40 CFR 60.46a (h), if PSNH has not obtained the minimum quantity of emissions data as required pursuant to 40 CFR 60.47a, EPA/DES may determine compliance with the emission requirement for 40 CFR 60.43a and 60.44a for the day on which the 30 day period ends by following the applicable procedures of 40 CFR 60 Appendix A Method 19, Section 7.</p>		
2.	SR5	Performance tests for SO <sub>2</sub> , NO <sub>x</sub> , Opacity	<p>a. Pursuant to 40 CFR 60.8, PSNH shall conduct initial performance tests.</p> <p>b. In conducting the performance tests required by 40 CFR 60.8, PSNH shall use the reference methods and procedures in 40 CFR 60 Appendix A or the methods and procedures listed in 40 CFR 60.48a (e), except as provided in 40 CFR 60.8 (b), which states that the performance tests shall be conducted and data reduced in accordance with the test methods and procedures of each applicable subpart unless EPA:</p> <ul style="list-style-type: none"> <li>i) Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;</li> <li>ii) Approves the use of an equivalent method;</li> <li>iii) Approves the use of an alternative method, the results of which has been determined to be adequate for indicating whether a specific source is in compliance;</li> <li>iv) Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to EPA's satisfaction that the facility is in compliance with the standard; or</li> <li>v) Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.</li> <li>vi) The requirements of 40 CFR 60.8 (b) shall not be construed to abrogate EPA's authority to require testing under Section 114 of the Clean Air Act.</li> </ul> <p>c. Pursuant to 40 CFR 60.48a (a), 40 CFR 60.8(f) does not apply to the performance tests for SO<sub>2</sub> and NO<sub>x</sub>.</p> <p>d. Pursuant to 40 CFR 60.8 (c), PSNH shall conduct the performance tests under such conditions as specified by EPA and/or DES based on representative performance of the facility.</p>		40 CFR 60.48a (a) and 60.8 (a), (b), and (c)

**Table 6: Initial Compliance Demonstration Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
3.	SR5	Particulate Matter and Opacity	<p>PSNH shall determine compliance with the particulate matter standard of 40 CFR 60.42a as follows:</p> <ol style="list-style-type: none"> <li>The dry basis F factor (O<sub>2</sub>) procedures of Method 19 shall be used to compute the PM emission rate;</li> <li>For the PM concentration, Method 5 shall be used at facilities without wet FGD systems and Method 5 B shall be used after wet FGD systems.</li> <li>The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 (dscm) (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160±14°C (320±25°F).</li> <li>For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O<sub>2</sub> concentration. The O<sub>2</sub> sample shall be obtained simultaneously with, and at the same traverse points as the particulate run. If the particulate run has more than 12 traverse points, the O<sub>2</sub> traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O<sub>2</sub> traverse points. If the grab sampling procedure is used, the O<sub>2</sub> concentration for the run shall be the arithmetic mean of the sample O<sub>2</sub> concentrations at all traverse points.</li> <li>PSNH shall use Method 9 and the procedures of 40 CFR 60.11 to determine opacity.</li> </ol>		40 CFR 60.48a (b)
4.	SR5	SO <sub>2</sub>	<p>PSNH shall determine compliance with the SO<sub>2</sub> standards of 40 CFR 60.43a as follows:</p> <ol style="list-style-type: none"> <li>The percent of potential SO<sub>2</sub> emissions (%Ps) to the atmosphere shall be computed using the following equation: <math display="block">\%Ps = [(100 - \%Rf) * (100 - \%Rg)] / 100</math> <p>where:  %Ps = percent potential SO<sub>2</sub> emissions (%)  %Rf = percent reduction from fuel pretreatment (%)  %Rg = percent reduction by SO<sub>2</sub> control system (%).</p> </li> <li>The procedures in Method 19 may be used to determine percent reduction (%Rf) of sulfur by such processes as fuel pretreatment (e.g., physical coal cleaning), coal pulverizers, and bottom and flyash interactions. This determination is optional.</li> <li>The procedures in Method 19 shall be used to determine the percent SO<sub>2</sub> reduction (%Rg)</li> </ol>		40 CFR 60.48a (c)

**Table 6: Initial Compliance Demonstration Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>of any SO<sub>2</sub> control system. Alternatively, a combination of an “as-fired” fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the SO<sub>2</sub> control device and the average SO<sub>2</sub> input rate from the “as-fired” fuel analysis for 30 successive boiler operating days.</p> <p>d. The appropriate procedures in Method 19 shall be used to determine the emission rate.</p> <p>e. The CEMs shall be used to determine the concentrations of SO<sub>2</sub> and CO<sub>2</sub> or O<sub>2</sub>.</p>		
5.	SR5	NOx	<p>PSNH shall determine compliance with the NOx standard in 40 CFR 60.44a as follows:</p> <p>a. The appropriate procedures in Method 19 shall be used to determine the emission rate.</p> <p>b. The CEMs shall be used to determine the concentrations of NOx and CO<sub>2</sub> or O<sub>2</sub>.</p>	Daily (for 30-day Rolling Average)	40 CFR 60.48a(d)
6.	SR5	Performance testing for HCl, Mercury, CO, and PM	<p><u>General Performance Test Conditions</u></p> <p>PSNH shall demonstrate compliance with the emission limitations specified in Table 5, and establish operating limits based on the initial compliance demonstration performance tests.</p> <p>PSNH shall conduct the initial compliance performance test at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, and mercury. These requirements could result in the need to conduct more than one performance test. The performance test shall not be conducted during periods of startup, shutdown, or malfunction, and shall consist of three separate test runs for each performance test, with each run lasting at least 1 hour.</p>		Env-A 802 40 CFR 63.7520(d) & 63.7530
7.	SR5		<p><u>Site-Specific Test Plan - Performance Test Protocol</u></p> <p>a. PSNH shall submit to DES and EPA a site-specific test plan for approval at least 60 calendar days before the initial performance test is scheduled to begin. The following information shall be included in the site-specific test plan:</p> <p>i. Facility name, address, telephone number and contact name;</p> <p>ii. Name of the contractor testing company, company contact and telephone number;</p> <p>iii. A complete program description;</p> <p>iv. Test schedule;</p> <p>v. A description of the device to be tested;</p>		Env-A 802 40 CFR 60.8(d), 63.7(c), & 63.7520(a)

**Table 6: Initial Compliance Demonstration Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite		
			<div>vi. A description of the planed operational mode of the device during the testing period;</div> <div>vii. A list of process data to be collected including dry sorbent injection rate, fuel type, fuel feed rate, pressure drop across the bag house, along with the frequency of data collection;</div> <div>viii. Test methods to be used;</div> <div>ix. Calibration methods and sample data sheets;</div> <div>x. Sample collection and analysis methods;</div> <div>xi. Description of the standard operating procedures (SOPs) for laboratory analysis of samples; and</div> <div>xii. Quality assurance procedures specific to the testing.</div> <div>b. In the event PSNH is unable to conduct the performance test on the date specified in the notification requirement of this section, due to unforeseeable circumstances beyond his/her control, PSNH shall notify DES and/or EPA within 5 days prior to the scheduled performance test date and specify the date when the performance test is rescheduled.</div> <div>c. At least 15-days prior to commencement of testing, the Permittee, and any contractor that may be retained for the testing shall participate in a pretest conference with a DES and/or EPA representative.</div> <div>d. DES and/or EPA representatives shall observe the emission testing. Observation of the performance test by EPA is optional and at EPA’s discretion. Upon commencement of any performance testing, the testing shall not be aborted without approval of the on-site DES and/or EPA representative.</div> <div>e. PSNH shall provide sampling ports, platforms, and access in accordance with 40 CFR Part 60.8(d).</div>				
8.	SR5		<div>Performance Stack Testing</div> <div>a. PSNH shall demonstrate compliance with the emission limitations specified in Table 5 through performance testing. Stack sampling analysis shall be conducted according to the following:</div> <table><tr><td>Parameter</td><td>40 CFR 60 Appendix A Test Method</td></tr></table>	Parameter	40 CFR 60 Appendix A Test Method		Env-A 802, 40 CFR 60, Appendix A 61 Appendix B, 63.7520 & 63.7521
Parameter	40 CFR 60 Appendix A Test Method						

**Table 6: Initial Compliance Demonstration Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite																				
			<table><tr><td>Sampling port location &amp; number of traverse points</td><td>Method 1</td></tr><tr><td>Stack gas velocity and volumetric flow-rate</td><td>Method 2, 2F or 2G</td></tr><tr><td>Oxygen (O<sub>2</sub>) and carbon dioxide (CO<sub>2</sub>)</td><td>Method 3A or 3B or ASME PTC Part 10(1981)</td></tr><tr><td>Stack gas moisture content</td><td>Method 4</td></tr><tr><td>Particulate matter (PM) concentration</td><td>Method 5 or 17</td></tr><tr><td>Opacity</td><td>Method 9 AND COMS</td></tr><tr><td>Carbon monoxide (CO)</td><td>Method 10, 10A, or 10B</td></tr><tr><td>Hydrogen chloride (HCl) concentration</td><td>Method 26 or 26A</td></tr><tr><td>Mercury (Hg) concentration</td><td>Method 29, 101A, or ASTM D6784-02</td></tr><tr><td>Conversion of emission concentration to lb/MMBtu</td><td>Method 19 F-factor</td></tr></table> <p>b. PSNH must notify EPA and DES at least 60-days prior to testing, if alternative test methods will be used.</p>	Sampling port location & number of traverse points	Method 1	Stack gas velocity and volumetric flow-rate	Method 2, 2F or 2G	Oxygen (O <sub>2</sub> ) and carbon dioxide (CO <sub>2</sub> )	Method 3A or 3B or ASME PTC Part 10(1981)	Stack gas moisture content	Method 4	Particulate matter (PM) concentration	Method 5 or 17	Opacity	Method 9 AND COMS	Carbon monoxide (CO)	Method 10, 10A, or 10B	Hydrogen chloride (HCl) concentration	Method 26 or 26A	Mercury (Hg) concentration	Method 29, 101A, or ASTM D6784-02	Conversion of emission concentration to lb/MMBtu	Method 19 F-factor		
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9.	SR5		<p><u>Fuel testing</u></p> <p>PSNH shall develop and submit a site-specific fuel analysis plan to DES for review and approval no later than 180 days before the date chosen to demonstrate compliance. The plan must include:</p> <p>a. Identification of all fuel types anticipated to be burned in the unit that have the highest concentration of chlorine, and/or mercury;</p> <p>b. For each fuel type, notification of whether PSNH or the fuel supplier will conduct the fuel analysis;</p> <p>c. For each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples;</p> <p>d. Samples should be collected at locations that most accurately represents the fuel type at a point prior to the mixing of dissimilar fuel types;</p> <p>e. For each fuel type, the analytical methods, with the expected minimum detection limits to be used for the measurement of chloride and mercury;</p> <p>f. Detailed description of the methods and procedures of collection and analysis if</p>		40 CFR 63.7510(a), 63.7521(b) & 63.7530																				

**Table 6: Initial Compliance Demonstration Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite																
			<p>alternative analytical methods will be used;</p> <p>g. If fuel analyses will be performed by the supplier, the fuel supplier must use the analytical methods specified below;</p> <p>h. Fuel sampling and analysis shall be conducted according to the following:</p> <table><tr><th>Parameter</th><th>Test Method</th></tr><tr><td>Collect fuel</td><td>Table 6, Item 10, ASTM D2214-03 or D6323-98</td></tr><tr><td>Composite fuel</td><td>Table 6, Item 10</td></tr><tr><td>Prepare composited fuel</td><td>SW846-3050B, ASTM D2013-01, or D5198-92</td></tr><tr><td>Determine heat content</td><td>ASTM D5865-03a or E711-87</td></tr><tr><td>Determine moisture content</td><td>ASTM D3173-02 or E871-82</td></tr><tr><td>Hydrogen chloride (HCl) concentration</td><td>SW846-9250 or ASTM E776-87</td></tr><tr><td>Mercury (Hg) concentration</td><td>ASTM D3684-01 or SW846-7471A</td></tr></table> <p>Convert concentrations into units of pounds of pollutant per MMBtu (lb/MMBtu); and</p> <p>Establish the maximum fuel pollutant input levels as follows:</p> $P_{input} = \sum_{i=1}^n (X_i)(Q_i)$ <p>Where:</p> <p><math>P_{input}</math> = Maximum amount of pollutant, <math>i</math>, entering the boiler in lb/MMBtu;</p> <p><math>X_i</math> = Average concentration of pollutant in fuel type, <math>i</math>, in lb/MMBtu;</p> <p><math>Q_i</math> = Fraction of the total heat input from fuel type, <math>i</math>, based on the fuel mixture that has the highest content of pollutant. If multiple fuel types are not burned, <math>Q_i = 1</math>.</p> <p><math>n</math> = Number of different fuel types burned in the boiler for the mixture that has the highest content of pollutant.</p>	Parameter	Test Method	Collect fuel	Table 6, Item 10, ASTM D2214-03 or D6323-98	Composite fuel	Table 6, Item 10	Prepare composited fuel	SW846-3050B, ASTM D2013-01, or D5198-92	Determine heat content	ASTM D5865-03a or E711-87	Determine moisture content	ASTM D3173-02 or E871-82	Hydrogen chloride (HCl) concentration	SW846-9250 or ASTM E776-87	Mercury (Hg) concentration	ASTM D3684-01 or SW846-7471A		
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Determine moisture content	ASTM D3173-02 or E871-82																				
Hydrogen chloride (HCl) concentration	SW846-9250 or ASTM E776-87																				
Mercury (Hg) concentration	ASTM D3684-01 or SW846-7471A																				
10.	SR5		<p><u>Fuel Composite Sampling Requirements</u></p> <p>a. Collection of fuel samples must be conducted for each fuel type burned in the boiler during each performance test. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing other dissimilar fuel types.</p> <p>b. If sampling from a feed belt or conveyer, a minimum of 3 composite fuel samples for each</p>		40 CFR 63.7521																

**Table 6: Initial Compliance Demonstration Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>fuel type shall be collected as follows:</p> <ol style="list-style-type: none"> <li>Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum of two pounds of sample. All the material (fines and course) in the full cross-section must be collected. Transfer the sample to a clean plastic bag.</li> <li>Perform the sampling as specified in (i) above a minimum of twice more at approximately equal intervals during the testing period and continue on to d below;</li> </ol> <p>c. If sampling from a fuel pile or truck, select a minimum of 5 sampling locations uniformly spaced over the surface of the pile as follows:</p> <ol style="list-style-type: none"> <li>At each sampling site, dig into the pile to a depth of 18 inches. Insert a clean flat square shovel into the hole and withdraw a sample,</li> <li>Transfer all samples to a clean plastic bag;</li> </ol> <p>d. At the completion of the 1-hour test run, thoroughly mix and pour the entire sample from each grab sample onto a clean plastic sheet;</p> <p>e. Break samples pieces larger than 3 inches into smaller sizes;</p> <p>f. Make a pie shape out of the entire composite sample and subdivide into 4 equal parts;</p> <p>g. Separate one of the quarter samples as the first subset. If this subset is too large for grinding, repeat (f) above with the quarter sample and obtain a one-quarter sub-sample for analysis. Place in a clean plastic bag, and send to the laboratory for the appropriate analysis.</p>		
11.	SR5		<p><u>Fuel Based Compliance Alternative</u></p> <p>If PSNH has chosen to demonstrate compliance with the emission limitations for mercury, and/or HCl specified in Table 1 using fuel analysis, analysis for each type of fuel burned in the boiler must be performed according to Table 6, Item 9.</p> <p>The 90<sup>th</sup> percentile confidence level fuel pollutant concentration of the solid fuels analyzed must be determined as follows:</p> $P_{i90} = x_i + [t_{n-1} * s]$ <p>Where:</p> <p><math>P_{i90}</math> = 90<sup>th</sup> percentile confidence of pollutant <math>i</math>, lb/MMBtu;</p> <p><math>x_i</math> = Average concentration of pollutant in fuel type, <math>i</math>, in lb/MMBtu;</p> <p><math>t_{n-1}</math> = t-distribution at <math>n-1</math> degrees of freedom</p>		40 CFR 63.7530(d) & 63.7540(a)

**Table 6: Initial Compliance Demonstration Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>obtained from a t-distribution table at 0.1 level of significance;</p> <p><math>s</math> = standard deviation of the pollutant concentrations measured in the fuel samples in lb/MMBtu;</p> <p><math>n</math> = the number of samples analyzed to produce the average concentration, <math>\bar{x}_i</math>.</p> <p>The emission rate for HCl shall be calculated as follows:</p> $HCl = \sum_{i=1}^n (P_{i90} \times Q_i \times 1.028)$ <p>Where:</p> <p><math>HCl</math> = HCl emission rate in lb/MMBtu;</p> <p><math>P_{i90}</math> = 90<sup>th</sup> percentile confidence of pollutant <math>i</math>, (lb/MMBtu) as calculated above;</p> <p><math>Q_i</math> = Fraction of total heat input from fuel type <math>i</math>, based on the fuel mixture that has the highest content of chlorine. If multiple fuel types are not burned, <math>Q_i = 1</math>;</p> <p><math>1.028</math> = molecular weight ratio of HCl to chlorine;</p> <p><math>n</math> = the number of samples analyzed.</p> <p>The emission rate for mercury shall be calculated as follows:</p> $Hg = \sum_{i=1}^n (P_{i90} \times Q_i)$ <p>Where:</p> <p><math>Hg</math> = Mercury emission rate in lb/MMBtu;</p> <p><math>P_{i90}</math> = 90<sup>th</sup> percentile confidence of pollutant <math>i</math>, (lb/MMBtu) as calculated above;</p> <p><math>Q_i</math> = Fraction of total heat input from fuel type <math>i</math>, based on the fuel mixture that has the highest content of mercury. If multiple fuel types are not burned, <math>Q_i = 1</math>;</p> <p><math>n</math> = the number of different fuel types in the mixture.</p>		
12.	SR5		<p><u>Site-Specific Monitoring Plan - Continuous Monitoring System</u></p> <p>PSNH shall develop and submit a site-specific monitoring plan for the continuous monitoring system (CMS) for carbon monoxide, opacity, and diluent monitors. The site-specific monitoring plan shall:</p> <ol style="list-style-type: none"> <li>Be submitted to EPA and DES for review and approval at least 60-days before the initial performance evaluation of the CMS;</li> <li>Install sampling probe or other interface at a</li> </ol>	At least 60-days before the initial performance evaluation of the CMS	Env-A 808, 40 CFR 63.8, 60 App A, 63.13(e)(1), 63.7505(d), 63.7510(a), & 63.7525

**Table 6: Initial Compliance Demonstration Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (on or downstream of the last control device);</p> <p>c. Contain performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;</p> <p>d. Implement performance evaluation procedures and acceptance criteria for CEMS for ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), (4)(i), and PS 4A of 40 CFR part 60, Appendix A;</p> <p>e. Implement performance evaluation procedures and acceptance criteria for COMS for ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), (4)(ii), and PS 1 of 40 CFR part 60, Appendix A;</p> <p>f. Implement ongoing recordkeeping and reporting procedures in accordance with the requirements in §63.10(c), (e)(1), and (e)(2)(i);</p> <p>g. Develop and implement quality assurance procedures in accordance with the general requirements of §63.8(d). At a minimum, the plan must include a daily calibration drift assessment, quarterly performance audit, and an annual zero alignment audit;</p> <p>h. Conduct a performance evaluation of each CMS in accordance with the site specific monitoring plan;</p> <p>i. Must operate and maintain the CMS in continuous operation in accordance with the site-specific monitoring plan; and</p> <p>j. CMS data must be reduced according to §63.8(g)(2).</p>		

**Table 6: Initial Compliance Demonstration Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
13.	SR5		<u>Solid Sorbent Injection</u> PSNH shall establish a site-specific minimum sorbent injection rate operating limitation using data from the injection rate monitors and the HCl performance test as follows: <ol style="list-style-type: none"> <li>Collect dry sorbent injection rate data every 15 minutes during the entire period of the initial performance test;</li> <li>Determine the average sorbent injection rate for each individual test run in the three-run performance test by computing the average of all 15-minute readings taken during each test run.</li> </ol>		40 CFR 63.7510(a), 63.7520(d) & 63.7525(h)

### C. Monitoring/Testing Requirements

PSNH is subject to the monitoring/testing requirements as contained in Table 7 below:

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
1.	SR5	lb NOx/ megawatt-hour gross heat output	PSNH shall calculate NOx emissions by multiplying the average hourly NOx output concentration, measured according to the provisions of 40 CFR 60.47a (c) using the CEMS, by the average hourly flow rate, measured according to the provisions of 40 CFR 60.47a (l) using a continuous flow monitoring system, and divided by the average hourly gross energy output, measure according to the provisions of 40 CFR 60.47a (k) using a wattmeter.	Hourly	40 CFR 60.46a ( ), (i)
2.	SR5	Opacity	To measure opacity, PSNH shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system.	Continuously	40 CFR 60.47a (a), Env-A 808.03(b)
3.	SR5	SO <sub>2</sub>	To measure SO <sub>2</sub> emissions, PSNH shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system as follows: <ol style="list-style-type: none"> <li>SO<sub>2</sub> emissions are monitored at both the inlet and outlet of the SO<sub>2</sub> control device; and</li> <li>An “as-fired” fuel monitoring system (upstream of coal pulverizers) meeting the requirements of US EPA Method 19 may be used to determine potential SO<sub>2</sub> emissions in place of the CEMS at the inlet to the SO<sub>2</sub> control device.</li> </ol>	Continuously	40 CFR 60.47a (b)
4.	SR5	NOx	<ol style="list-style-type: none"> <li>To measure NOx emissions, PSNH shall install, calibrate, maintain, and operate a continuous</li> </ol>	Continuously	40 CFR 60.47a (c)

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>monitoring system, and record the output of the system; or</p> <p>b. If PSNH has installed a NO<sub>x</sub> CEMs to meet the requirements of 40 CFR 75 and is continuing to meet the ongoing requirements of 40 CFR 75, that CEMS may be used to meet the requirements of 40 CFR 60 Subpart Da, except that PSNH shall also meet the requirements of 40 CFR 60.49a (reporting requirements). Data reported to meet the requirements of 40 CFR 60.49a shall not include data substituted using the missing data procedures in 40 CFR 75 Subpart D, nor shall the data have been bias adjusted according to the procedures of 40 CFR 75.</p>		
5.	SR5	O <sub>2</sub> or CO <sub>2</sub>	To measure the O <sub>2</sub> or CO <sub>2</sub> content of the flue gas at each location where SO <sub>2</sub> or NO <sub>x</sub> emissions are monitored, PSNH shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system	Continuously	40 CFR 60.47a (d)
6.	SR5	CEMS	The SO <sub>2</sub> , NO <sub>x</sub> , O <sub>2</sub> or CO <sub>2</sub> continuous monitoring system shall be operated and data recorded during all periods of operation, including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.	Continuously except as specified by the regulation	40 CFR 60.47a (e)
7.	SR5	CEM Minimum Data Requirements	PSNH shall obtain emissions data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, PSNH shall supplement emission data with other monitoring systems approved by EPA and/or DES or the reference methods and procedures specified in 40 CFR 60.47a (h) or the alternatives listed in 40 CFR 60.47a (j).	At least 18 hours in at least 22 out of 30 consecutive boiler operating days and as specified by regulation	40 CFR 60.47a (f)
8.	SR5	CEM Minimum Data Requirements for 1-hour Averages	The 1-hour averages required under 40 CFR 60.13 (h) are expressed in ng/J (lb/MMBtu) heat input and used to calculate the average emission rates under 40 CFR 60.46a. The 1-hour averages are calculated using the data points required under 40 CFR 60.13 (b). At least two data points must be used to calculate the 1-hour averages.	As specified by regulation	40 CFR 60.47a (g)
9.	SR5	Methods to Supplement CEM Data Requirements	When it becomes necessary to supplement continuous monitoring system data to meet the minimum data requirements in 40 CFR 60.47a (f), the owner or operator shall use the reference methods and procedures as specified in 40 CFR 60.47a (h). Acceptable alternative methods and procedures are given in 60.47a (j).	As necessary to supplement CEM data	40 CFR 60.47a (h)
10.	SR5	Methods and Procedures for Performance Evaluations	PSNH shall use the methods and procedures of 40 CFR 60.47a (i) to conduct monitoring system performance evaluations pursuant 40 CFR 60.13 (c) and calibration checks pursuant to 40 CFR 60.13 (d). Acceptable alternative methods and procedures are	During Performance Evaluations and Calibration	40 CFR 60.47a (i)

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
		and Calibration Checks	listed in 40 CFR 60.47a (j).	Checks	
11.	SR5	Gross Heat Output and Steam Flow	PSNH shall use the procedures specified below to determine gross output to demonstrate compliance with the output-based standard of 1.6 lb NO <sub>x</sub> /MW-hr pursuant to 40 CFR 60.44a (d)(1): a. PSNH shall install, calibrate, maintain, and operate a wattmeter. PSNH shall measure and record the gross electrical output in megawatt-hour on a continuous basis.	Continuously	40 CFR 60.47a (k)
12.	SR5	Exhaust Gas Flow	a. PSNH shall install, certify, operate and maintain a continuous flow monitoring system meeting the requirements of Performance Specification 6 of Appendix B and Procedure 1 of Appendix F of 40 CFR 60 Subpart Da. PSNH shall record the output of the system for measuring the flow of exhaust gases discharged to the atmosphere or b. Alternatively, PSNH may use data from a continuous flow monitoring system certified according to the requirements of 40 CFR 75.20, meeting the applicable quality control and quality assurance requirements of 40 CFR 75.21, and validated according to 40 CFR 75.23.	Continuously	40 CFR 60.47a (l) and (m)
13.	SR5	Particulate Matter	Pursuant to 40 CFR 60.48a (e), PSNH may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.48a: a. For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). The procedures of Secs. 2.1 and 2.3 of Method 5B may be used in Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent is saturated or laden with water droplets. b. The F <sub>c</sub> factor (CO <sub>2</sub> ) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of Sec. 60.46(d)(1). The CO <sub>2</sub> shall be determined in the same manner as the O <sub>2</sub> concentration.	As necessary	40 CFR 60.48a(e)
14.	SR8	Opacity from Coal Crusher	The owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.252 using Method 9 and the procedures in 40 CFR 60.11 to determine opacity.	During Performance Tests	§40 CFR 60.254(b)(2) and 40 CFR 60.8 NSPS for Coal Preparation Plants
15.	SR5	NO <sub>x</sub> Emissions	PSNH shall install, certify, operate and maintain, a NO <sub>x</sub> -diluent continuous emission monitoring system (consisting of a NO <sub>x</sub> pollutant concentration monitor and an O <sub>2</sub> or CO <sub>2</sub> diluent gas monitor) with an	Continuously	Env-A 808.02 (a)(1) and 40 CFR 75.10(a)(2),

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			automated data acquisition and handling system for measuring and recording NO <sub>x</sub> concentration (in ppm) averaged on an hourly and 24-hour calendar day basis, O <sub>2</sub> or CO <sub>2</sub> concentration (in percent O <sub>2</sub> or CO <sub>2</sub> ) and NO <sub>x</sub> mass emission rate (in lb/MMBTU) averaged on an hourly, 24-hour calendar day, and annual basis for each unit. PSNH shall account for total NO <sub>x</sub> emissions, both NO and NO <sub>2</sub> , either by monitoring for both NO and NO <sub>2</sub> or by monitoring for NO only and adjusting the emissions data to account for NO <sub>2</sub> . PSNH shall measure and record NO <sub>x</sub> emissions in lb/hr averaged for one-hour and a 24-hour calendar day, and tons/consecutive 12-month period. PSNH shall calculate hourly, quarterly, and annual NO <sub>x</sub> emission rates (in lb/MMBTU) by combining the NO <sub>x</sub> concentration (in ppm), diluent concentration (in percent CO <sub>2</sub> ), and percent moisture according to the procedures in 40 CFR 75 Appendix F.		75.12, and Env-A 1211.21(a)(b)(c)
16.	SR5	NO <sub>x</sub> Mass Emissions	PSNH shall calculate hourly NO <sub>x</sub> mass emissions (in lbs) by multiplying the hourly NO <sub>x</sub> emission rate (in lbs/MMBTU) by the hourly heat input rate (in MMBTU/hr) and the unit or stack operating time. PSNH shall also calculate quarterly and cumulative year-to-date NO <sub>x</sub> mass emissions and (in tons) by summing the hourly NO <sub>x</sub> mass emissions according to the procedures in 40 CFR 75 Appendix F Section 8.	Hourly, quarterly, and cumulative year-to-date	40 CFR 75.71, and 75.72 and Env-A 3212 and Env-A 2910
17.	SR5	Ozone Season NO <sub>x</sub> Emission Rate and NO <sub>x</sub> mass emissions	PSNH, when required, shall determine the ozone season NO <sub>x</sub> emission rate (in lb/MMBTU) by dividing ozone season NO <sub>x</sub> mass emissions (in lbs) by heat input. PSNH shall also calculate cumulative NO <sub>x</sub> mass emissions for the ozone season (in tons) by summing the hourly NO <sub>x</sub> mass emissions according to the procedures in 40 CFR 75 Appendix F Section 8.	During the ozone season	Env-A 3212.01 and 40 CFR 75.75(b) and 75.72
18.	SR5	Sulfur Content of Natural Gas	Documentation from fuel supplier or conduct testing to determine the sulfur content of gaseous fuels.	As requested by DES and/or EPA	Env-A 806.03
19.	SR5	Sulfur Content of Bituminous Coal	Documentation from the fuel supplier or testing (in accordance with Method ASTM D 4239-00) that certifies the weight-percent of sulfur for each delivery of bituminous coal. The sulfur content shall be expressed in pounds of sulfur per million BTU gross heat content.	Each delivery of fuel	Env-A 806.04
20.	SR5	Fuel Sampling	In order to determine compliance, the division shall sample or require sampling or re-sampling of any fuel. Such sampling, which shall include compositing, testing, and analyzing fuel samples, shall be conducted in accordance with the most recent ASTM methods or the methodology specified in Env-A 800 or EPA approved methods.	As requested by DES	Env-A 1610.01 Fuel Analysis for Compliance.
21.	SR5	SO <sub>2</sub> Emissions	PSNH shall install, certify, operate and maintain, an SO <sub>2</sub> CEMS automated data acquisition and handling	Continuously	Env-A 808.02 (a)(1) and 40

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			system for measuring and recording SO <sub>2</sub> concentration (in ppm) averaged on an hourly and 24-hour calendar day basis, volumetric gas flow (in scfh), and SO <sub>2</sub> mass emissions (in lb/hr averaged over one hour and each 24-hour calendar day, and tons/consecutive 12-month period and tons/calendar year) for each unit. PSNH shall also measure and record the SO <sub>2</sub> emission rate (in lb/MMBTU) averaged over each 24-hour calendar day. PSNH shall demonstrate compliance with the State Acid Rain Program emission caps by using the CEMS data.		CFR 75.10 (a)(1)
22.	SR5	CO <sub>2</sub> Emissions	PSNH shall install, certify, operate and maintain, a CO <sub>2</sub> CEMS automated data acquisition and handling system. PSNH shall measure and record CO <sub>2</sub> emissions in lb/hr over each 24-hour calendar day and CO <sub>2</sub> concentration in percent on an hourly average and over each 24-hour calendar day.	Continuously	40 CFR 75.10(a)(3), Env-A 808.02(a)(1)
23.	SR5	Stack volumetric flow rate	PSNH shall install, certify, operate and maintain, a CEMS automated data acquisition and handling system to measure and record stack volumetric flow rate (in kscfm) on an hourly average and over each 24-hour calendar day.	Continuously	40 CFR 75, Env-A 808.02(a)(1)
24.	SR5	Heat Input Rate	PSNH shall calculate the heat input rate (in MMBTU/hr) for every hour or part of an hour any fuel is combusted following the procedures in 40 CFR 75 Appendix F.	Hourly	40 CFR 75.10(c) and Env-A 2910.02
25.	SR5	Net Electrical Output	PSNH shall monitor net electrical output.	Annually	Env-A 2910.02 and 40 CFR 75
26.	SR5	Ozone Season Heat Input	PSNH shall calculate ozone season heat input for purposes of providing data needed for determining allocations by summing each unit's hourly heat input determined according to the procedures in 40 CFR 75 for all hours in which the unit operated during the ozone season	Hourly during ozone season	Env-A 3212.01 and 40 CFR 75.75(a)
27.	SR5	Operating Hours	PSNH shall maintain a log of the operating hours of the NWPP boiler.	Continuously	Env-A 903.03(b)
28.	SR5	Opacity	PSNH shall install, certify, operate and maintain, a continuous opacity monitoring system with the automated data acquisition and handling system for measuring and recording the opacity of emissions (in percent opacity) for each 6-minute period for each unit. As necessary, PSNH shall also use US EPA Method 9 to estimate opacity.	Continuously	40 CFR 75.10(a)(4), Env-A 807.02, Env-A 808.02 (a)(1), and Env-A 808.03(b)
29.	SR5	TSP	PSNH shall conduct stack testing using US EPA Method 5, 17, or 201a or other method approved by DES to determine the TSP emissions. PSNH shall calculate and record the TSP emission rate in lb/MMBTU on a 24-hour calendar day average and tons/consecutive 12-month period using stack test results and operating hours. PSNH may use other EPA-approved emission calculating methods to calculate TSP emissions.	Testing at least every 5 years and upon request by DES and/or EPA	

Table 7 – Monitoring and Testing Requirements					
Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
30.	SR5	PM <sub>10</sub>	PSNH shall conduct stack testing using US EPA Method 201a and 202, or other method approved by DES to determine PM <sub>10</sub> emissions. PSNH shall calculate and record the PM <sub>10</sub> emission rate in tons/consecutive 12-month period using stack test results and operating hours. PSNH may use other EPA-approved emission calculating methods to calculate PM <sub>10</sub> emissions. (Need to have PSNH stack test for condensable PM – Method 202)	Testing at least every 5 years and upon request by DES and/or EPA	
31.	SR5	Differential pressure of baghouse	PSNH shall measure the differential pressure of the baghouse using pressure differential gauges in the control room or equivalent monitoring device and shall record the pressure reading indicated by each monitoring device.	Daily	Env-A 906.01
32.	SR5	Ammonia slip	PSNH shall conduct stack testing using a DES-approved method to determine the ammonia slip.	Upon request by DES and/or EPA	
33.	SR5	TSP	PSNH shall calculate and record the TSP emission rate in lb/MMBTU averaged over 24-hour calendar day, lb/hr, tons/month, and tons/consecutive 12-month period using fuel consumption data and EPA-approved emission factors or stack test results.	Daily and Monthly	Env-A 906.01
34.	SR5	Fuel Consumption	PSNH shall measure and record the amount of fuel consumed using fuel flow meters and/or inventory purchase records.	Monthly	Env-A 903.03(a)
35.	SR8	Opacity	PSNH shall conduct the visible emission test using US EPA Method 22 only when the coal crusher is operating.	Monthly	Env-A 807.05
36.	SR5	Fuel Flow Meters- Periodic Monitoring	PSNH shall calibrate the fuel flow metering devices during planned outages. Calibration procedures and records shall be kept on file and made available to DES and/or EPA upon request.	During planned outages	
37.	SR5	CEM Hourly Operating Requirements & Valid Hour of CEM Data	<p>Pursuant to Env-A 40 CFR 75.10(d), PSNH shall ensure that the CEMS and components meet the following hourly operating requirements:</p> <ol style="list-style-type: none"> <li>PSNH shall ensure that each CEM is capable of completing a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute interval pursuant to Env-A 40 CFR 75.10(d) and pursuant to Env-A 808.03(c)(2) for each successive 5-minute period for gaseous emissions, unless a longer time period is approved in accordance with Env-A 809</li> <li>PSNH shall reduce all SO<sub>2</sub> concentrations, volumetric flow, SO<sub>2</sub> mass emissions, CO<sub>2</sub> concentration, CO<sub>2</sub> mass emissions (if</li> </ol>	Hourly	40 CFR 75.10(d) and Env-A 808.01(i) and 808.03

<sup>15</sup> The requirements of 40 CFR 75 are less stringent than Env-A 808. 40 CFR 75 requires hourly averages to be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. 40 CFR 75 allows an hourly average to be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour) if data are unavailable as a result of the performance of calibration, quality assurance, or preventive maintenance activities pursuant to 40 CFR 75.21 and 40 CFR Appendix B or backups of data from the data acquisition and handling system, or recertification, pursuant to 40 CFR 75.20.

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>applicable), NO<sub>x</sub> concentration, and NO<sub>x</sub> emission rate data collected by the monitors to hourly averages.</p> <p>c. PSNH shall use all valid measurements or data points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour.</p> <p>d. Failure of an SO<sub>2</sub> or CO<sub>2</sub> pollutant concentration monitor, NO<sub>x</sub> concentration monitor, flow monitor, or NO<sub>x</sub>-diluent CEMS to acquire the minimum number of data points for calculation of an hourly average shall result in the failure to obtain a valid hour of data and the loss of such component data for the entire hour.</p> <p>e. For a NO<sub>x</sub>-diluent monitoring system, an hourly average NO<sub>x</sub> emission rate in lb/MMBTU is valid only if the minimum number of data points is acquired by both the NO<sub>x</sub> pollutant concentration monitor and the diluent monitor (CO<sub>2</sub>).</p> <p>f. If a valid hour of data is not obtained, PSNH shall estimate and record emissions, moisture, or flow data for the missing hour by means of the automated data acquisition and handling system, in accordance with the applicable procedure for missing data.</p> <p>g. Pursuant to Env-A 808.01(i), a valid hour of CEM emissions data means a minimum of 42 minutes of CEM readings taken in any calendar hour, during which the CEM is not in an out of control period and the facility is in operation.<sup>15</sup></p> <p>h. Pursuant to Env-A 808.03(a), PSNH shall average and record the CEM data for gaseous emissions for each calendar hour.</p> <p>i. Pursuant to Env-A 808.03(c)(1), all CEM systems shall include a means to display instantaneous values of percent opacity and gaseous emission concentrations.</p>		
38.	SR5	Stack Volumetric Flow Measuring Device	<p>PSNH shall meet the following requirements for the stack volumetric flow measuring device:</p> <p>a. All differential pressure flow monitors shall have an automatic blow-back purge system installed and in wet conditions, shall have the capability for drainage of the sensing lines; and</p> <p>b. The stack flow monitoring system shall have the capability for manual calibration of the transducer while the system is on-line and for a zero check.</p>	Continuously	Env-A 808.03(d)
39.	SR5	Minimum Measurement Capability Requirements for CEMS	PSNH shall ensure that each CEMS is capable of accurately measuring, recording, and reporting data, and shall not incur an exceedance of the full scale range, except as provided in 40 CFR 75 Appendix A Sections 2.1.1.5, 2.1.2.5, and 2.1.4.3.	As specified by regulation	40 CFR 75.10(f)

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
40.	SR5	COMS Hourly Operating Requirements	<p>Pursuant to 40 CFR 75.10(d), PSNH shall ensure that each COMS and components meet the following hourly operating requirements:</p> <ul style="list-style-type: none"> <li>a. PSNH shall ensure that each continuous opacity monitoring system is capable of completing a minimum of one cycle of sampling and analyzing (and recording pursuant to Env-A 808.03(c)(2) unless a longer time period is approved in accordance with Env-A 809) for each successive 10-second period and one cycle of data recording for each successive 6-minute period.</li> <li>b. PSNH shall reduce all opacity data to 6-minute averages calculated in accordance with the provisions of 40 CFR 51 Appendix M, except where the SIP or operating permit requires a different averaging period, in which case the State requirement shall satisfy this Acid Rain Program requirement as shown below.</li> <li>c. Pursuant to Env-A 808.03(b)(1), PSNH shall average the opacity data to result in consecutive, non-overlapping 6-minute averages; and</li> <li>d. Pursuant to Env-A 808.03(b)(2), for units subject to the Env-A 2003.04(b) exemption, the total number of minutes in any 8-hour period where the opacity, as averaged in non-overlapping 6-minute periods, exceeds the applicable opacity standard.</li> <li>e. Pursuant to Env-A 808.03(c)(1), all CEM systems shall include a means to display instantaneous values of percent opacity and gaseous emission concentrations.</li> </ul>	Sampling for successive 10-second period and recording for successive 6-minute period	40 CFR 75.10(d) and Env-A 808.03(b) and (c)
41.	SR5	Specific Provisions for Monitoring SO <sub>2</sub> Emissions (SO <sub>2</sub> emissions and flow monitors)	Pursuant to 40 CFR 75.11, PSNH shall meet the specific provisions for SO <sub>2</sub> CEMS and flow monitoring systems: PSNH shall meet the general operating requirements in 40 CFR 75.10 for an SO <sub>2</sub> continuous emission monitoring system and a flow monitoring system.	As specified by regulations	40 CFR 75.11
42.	SR5	Specific Provisions for Monitoring NO <sub>x</sub> Emissions	<ul style="list-style-type: none"> <li>a. Pursuant to 40 CFR 75.12, 75.71, and 75.72 and Env-A 3212, PSNH shall meet the specific provisions for NO<sub>x</sub>-diluent CEMS, including the following: <ul style="list-style-type: none"> <li>i) Meet general operating requirements in 40 CFR 75.10 for a NO<sub>x</sub> continuous emission monitoring system. The diluent gas monitor in the NO<sub>x</sub> CEMS may measure either O<sub>2</sub> or CO<sub>2</sub> concentration in the flue gases.</li> <li>ii) Comply with moisture correction procedures according to 40 CFR 75.12(b)</li> </ul> </li> </ul>	Continuously	40 CFR 75.12, 75.71, and 75.72 and Env-A 3212

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			iii) Comply with NOx emission rate procedures contained in 40 CFR 75.12(c). iv) PSNH shall meet the annual and ozone season monitoring requirements according to 40 CFR 75.74, as applicable.		
43.	SR5	NOx Mass Emissions - Specific Provisions for Monitoring NOx Emissions for Alternative Monitoring System	PSNH shall meet the requirements of 40 CFR 75.12 including using the procedures of 40 CFR 75 Appendix E for estimating hourly NOx emission rate, using the procedures of 40 CFR Appendix D for determining hourly heat input, except for the heat input apportionment provisions of 40 CFR 75 Appendix D Section 2.1.2 to meet the NOx mass reporting provisions. If in the years after certification of the monitoring system, a unit's operation exceed a capacity factor of 20 percent in any calendar year or exceed a capacity factor of 10.0 percent averaged over three years, or exceed a capacity factor of 20.0 percent in any ozone season or exceed an ozone season capacity factor of 10.0 percent averaged over three years, PSNH shall install, certify, and operate a NOx CEMS and also meet the requirements of 40 CFR 75.71(c) no later than December 31 of the following calendar year.	Hourly	40 CFR 75 Appendix E Section 1.1 and 40 CFR 75.12(d)(2) and 75.71(d)
44.	SR5	Specific Provisions for Monitoring CO <sub>2</sub> Emissions	Pursuant to 40 CFR 75.13, PSNH shall meet the specific provisions for CO <sub>2</sub> CEMS and flow monitoring systems.	Continuously	40 CFR 75.13
45.	SR5	Specific Provisions for Monitoring Opacity	Pursuant to 40 CFR 75.14, the continuous opacity monitoring and recording system shall meet all the design, installation, equipment, and performance specifications of 40 CFR 60, Appendix B, Performance Specification 1, and all the operational and quality assurance requirements of Env-A 808 (new).	Continuously	40 CFR 75.14 and Env-A 808 (new)
46.	SR5	CEMS and COMS and Alternative Monitoring Certification	Pursuant to 40 CFR 75.20 and 40 CFR 75.70(d) and Env-A 3212.07 and Env-A 3212.10, PSNH shall recertify the CEMS and COMS and alternative monitoring system whenever PSNH makes a replacement, modification, or change to the systems or to the facility that could significantly affect the ability of the systems to accurately measure and record the requisite data. PSNH must submit an application for recertification of the monitoring system to EPA and DES	Whenever PSNH makes a replacement, modification, or change to the systems or to the facility that could significantly affect the ability of the systems to accurately measure and record the requisite data	40 CFR 75.20, 40 CFR 75.70(d), and 40 CFR 75 Appendix E Section 1.2 and Env-A 3212.07, 3212.09, 3212.10 and 2910.04
47.	SR5	QA/QC Requirements	a. Pursuant to 40 CFR 75.21 (a)(1) and 40 CFR 75.70, PSNH shall operate, maintain, and calibrate	As specified by regulation	40 CFR 75.21 and 75.70 and

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>each CEMS according to the quality assurance and quality control procedures in 40 CFR 75 Appendix B.</p> <p>b. Pursuant to 40 CFR 75.21(b), PSNH shall operate, calibrate, and maintain each COMS according to the procedures specified in the SIP, pursuant to 40 CFR 51 Appendix M.</p> <p>c. Pursuant to 40 CFR 75.21(c), PSNH shall ensure that all calibration gases used to quality assure the operation of the instrumentation shall meet the definition in 40 CFR 72.2.</p> <p>d. Pursuant to 40 CFR 75.21(d) and (e), PSNH shall comply with the provisions concerning consequences of audits and audit decertification.</p> <p>e. Within and prior to the ozone season, PSNH shall meet the quality assurance requirements contained in 40 CFR 75.74, as applicable.</p>		75.74
48.	SR5	QA/QC Requirements for Alternative Monitoring System	PSNH shall comply with the QA/QC procedures of 40 CFR 75 Appendix E and 40 CFR 75.74(c), as applicable. Pursuant to 40 CFR 75.74(b), PSNH may choose whether to meet the QA/QC requirements on an annual basis or an ozone season basis.	Annually or ozone season basis	40 CFR 75.70(e) and 40 CFR 75 Appendix E and 40 CFR 75.74(b) and (c)
49.	SR5	Reference Test Methods for Certification and Recertification of CEMS or COMS	PSNH shall use the reference test methods listed in 40 CFR 75.22 and included in Appendix A to 40 CFR 60 to conduct monitoring system tests for certification or recertification of CEMS and excepted monitoring systems under 40 CFR 75 Appendix E and quality assurance and quality control procedures.	During certification or recertification tests	40 CFR 75.22
50.	SR5	Out-of-Control Periods	<p>a. Pursuant to 40 CFR 75.21(e)(2), whenever a CEMS or COMS fails a quality assurance audit or any other audit, the system is out-of-control, and PSNH shall follow the procedures for out-of-control periods in 40 CFR 75.24.</p> <p>b. Pursuant to Env-A 3212.10 and 2910.06, whenever any monitoring system fails to meet the quality assurance requirements of 40 CFR 75 Appendix B, PSNH shall substitute the data using the applicable procedures in 40 CFR 75, Subpart D, Appendix D or E.</p> <p>c. Pursuant to 75.24, if an out-of-control period occurs to a monitor or CEMS, the owner or operator shall take corrective action and repeat the tests applicable to the out of control parameter as described in 40 CFR 75 Appendix B.</p> <p>d. For daily calibration error tests, an out of control period occurs when the calibration error of a pollutant concentration monitor exceeds 5.0% based upon the span value, the calibration error of a diluent gas monitor exceeds 1.0% O<sub>2</sub> or CO<sub>2</sub>, or the calibration error of a flow monitor exceeds</p>	As specified by regulation	40 CFR 75.21(e)(2) and 75.24 and Env-A 3212.10 and 2910.06 and 808.01(g)

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>6.0% based upon the span value, which is twice the applicable specification in 40 CFR 75 Appendix A.</p> <p>e. For quarterly linearity checks, an out of control period occurs when the error in linearity at any of the three gas concentrations (low, mid-range, and high) exceeds the applicable specification in 40 CFR 75 Appendix A.</p> <p>f. For relative accuracy test audits (RATAs), cylinder gas audit (CGAs), and relative accuracy audits (RAAs), an out of control period occurs when the sampling is completed and the CEMS fails the accuracy criteria until successful completion of the same audit after corrective action has occurred.</p> <p>g. Pursuant to Env-A 3212.10, whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any system or component should not have been certified or recertified because it did not meet a particular performance specification or other requirement pursuant to Env-A 800 or the applicable provisions of 40 CFR Part 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the department shall issue a notice of disapproval of the certification status of such system or component.</p> <p>h. For the purposes of this section, an audit shall be either a field audit or an audit of any information submitted to the department or the administrator.</p> <p>i. The data measured and recorded by the system or component shall not be considered valid quality-assured data from the date of issuance of the notification of the disapproval of certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests in accordance with Env-A 3212.07(t).</p> <p>j. The owner or operator shall follow the initial certification or recertification procedures for each disapproved system.</p>		
51.	SR5	Out of Control Periods for Opacity	<p>Out of control period for a CEMS measuring opacity is as follows:</p> <p>a. The time period beginning with the completion of the daily calibration drift check where the CD exceeds 2% opacity for 5 consecutive days, and ending with the CD check after corrective action has occurred that results in the performance specification drift limits being met;</p> <p>b. The time period beginning with the completion of a daily CD check preceding the daily CD check that results in the CD being greater than 5% opacity and ending with the CD check after</p>	As specified by regulation	Env-A 808.01(g)(2)

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>corrective action has occurred that results in the performance specification drift limits being met; or</p> <p>c. The time period beginning with the completion of a quarterly opacity audit where the CEMS fails the calibration error test as specified in 40 CFR 60, Appendix B, Specification 1 and ending with successful completion of the same audit where the CEMS passes the calibration error test established after corrective action has occurred.</p>		
52.	SR5	Data Availability and Missing Data Substitution Procedures	<p>a. PSNH shall follow the procedures in 40 CFR 75.30 through 75.37, 75.70(f), 75.74, and 40 CFR 75 Appendix E when a valid, quality-assured hour of data is not measured or recorded.</p> <p>b. For SRCT, PSNH shall provide substitute data pursuant to 40 CFR 75.74 and 40 CFR 75 Appendix E Section 2.5, when the QA/QC control parameters are exceeded or missing.</p> <p>c. Pursuant to Env-A 808.02(c)(2), PSNH shall comply with the minimum percentage data availability requirements pursuant to Env-A 808.10(a)-(d) to meet the requirements of Env-A 3200, <i>NOx Budget Program</i>.</p> <p>d. Pursuant to Env-A 808.10, if PSNH cannot meet the percentage data availability requirements, PSNH shall also follow the provisions of Env-A 808.10(e) – (g).</p> <p>e. Pursuant to 40 CFR 75.24(e), if COMS is out of control, PSNH shall follow the data availability requirements of Env-A 808.10.</p>	As specified by regulation	40 CFR 75.30 through 75.37 and 75.50(f) and 75.24(e) and 75.74 and 40 CFR 75 Appendix E Section 2.5 and Env-A 808.10 and 808.02(c)(2)
53.	SR5	General CEM Requirements	<p>a. Pursuant to 40 CFR 75.5 (b), PSNH must operate SR4, SR6, and SR5 in compliance with the requirements of 40 CFR 75.2 through 75.75 and 40 CFR 75 Appendices A through G.</p> <p>b. Pursuant to 40 CFR 75.5 (d), PSNH shall account for all emissions of SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub> in accordance with 40 CFR 75.10 through 75.19.</p> <p>c. Pursuant to 40 CFR 75.5 (e), PSNH shall not disrupt the continuous emission monitoring system or other approved emission monitoring method, and thereby not monitor or record SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub>, except for periods of recertification, or periods when calibration, quality assurance, or maintenance is performed pursuant to 40 CFR 75.21 and 40 CFR 75 Appendix B.</p> <p>d. The CEMS shall meet the most stringent requirements of 40 CFR 75 and Env-A 808.</p>	Continuously	40 CFR 75.5 and Env-A 808 (new)
54.	SR5	CEMS Performance and Audit Requirements	<p>PSNH shall ensure that each CEMS meets the following requirements:</p> <p>a. Each CEMS meets equipment, installation, and performance specifications in 40 CFR 75 Appendix A;</p> <p>b. Each CEMS is maintained according to the quality</p>	As specified by regulation	40 CFR 75.10(b) and Env-A 808.07, 808.08, and 808.09 and 40 CFR 75

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>assurance and quality control procedures in 40 CFR 75 Appendix B; and</p> <p>c. Each CEMS shall record SO<sub>2</sub> and NO<sub>x</sub> emissions in the appropriate units of measurement.</p> <p>d. PSNH shall comply with the most stringent CEM audit requirements contained in 40 CFR 75 and Env-A 808.07, <i>General Audit Requirements</i>, Env-A 808.08, <i>Audit Requirements for Gaseous CEM Systems</i>, and Env-A 808.09, <i>Audit Requirements for Opacity CEM Systems</i>.</p>		Appendices A and B
55.	SR5	NO <sub>x</sub> Mass Emissions – General Provisions	<p>a. Pursuant to Env-A 3200, <i>NO<sub>x</sub> Budget Program</i>, PSNH shall comply with the provisions of 40 CFR 75 Subparts A, C, D, E, F, and G and Appendices A through G applicable to NO<sub>x</sub> concentration, flow rate, NO<sub>x</sub> emission rate and heat input, as set forth and referenced in Subpart H.</p> <p>b. The requirements of Subpart H for CO<sub>2</sub>, SO<sub>2</sub>, opacity monitoring, recordkeeping, and reporting do not apply to units that are subject to a State or federal NO<sub>x</sub> mass emission reduction program only and are not affected units with an Acid Rain Program emission limitation (i.e., SRCT).</p>	As specified by regulation	Env-3212.01 and 40 CFR 75.70(a)
56.	SR5	NO <sub>x</sub> Mass Emissions Provisions-Prohibitions	<p>PSNH is prohibited from the following:</p> <p>a. Using alternative monitoring system, reference method, or any other alternative for the required CEMS without approval through petition process in 40 CFR 75.70(h).</p> <p>b. Discharging or allowing discharge of NO<sub>x</sub> emissions without accounting for all emissions in accordance with the provisions of Subpart H, except as provided in 40 CFR 75.74.</p> <p>c. Disrupting the CEMS or any other approved emission monitoring method, and thereby avoid monitoring and recording NO<sub>x</sub> mass emissions, except for periods of re-certification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the provisions of 40 CFR 75 Subpart H applicable to the monitoring systems under 40 CFR 75.71, except as provided in 40 CFR 75.74.</p> <p>d. Retiring or permanently discontinuing the use of the CEMS, or any other approved emission monitoring system except under one of the following circumstances:</p> <p>i) During a period that the unit is covered by a retired unit exemption that is in effect under the State or federal NO<sub>x</sub> mass emission reduction program that adopts the requirements of Subpart H;</p> <p>ii) The owner or operator is monitoring NO<sub>x</sub> emissions from the affected unit with another certified monitoring system approved, in accordance with the provisions of 40 CFR 75.70(d); or</p>	Continuously	40 CFR 75.70(c)

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			iii) The designated representative submits notification of the date of certification testing of a replacement monitoring system in accordance with 40 CFR 75.61.		
57.	SR5	NOx Mass Emissions-Alternative Monitoring System	PSNH shall comply with the provisions of 40 CFR 75 Appendix E and Env-A 3212.09 as an alternative to continuous emission monitoring system requirements.	During the ozone season	40 CFR 75 Appendix E and Env-A 3212.09
58.	SR5	NOx Mass Emissions – Annual Monitoring	PSNH shall meet the requirements of 40 CFR 75 Subpart H during the entire calendar year for SR4, SR6, and SR5 and on an ozone season basis except as specified for SRCT.	During the calendar year for SR4, SR6, and SR7 and during the ozone season for SRCT	40 CFR 75.74(a) and (b)
59.	SR5	Valid Averaging Periods for Gaseous and Opacity CEMS	The number of hours of valid CEM and COM data required for determining a valid averaging period for the different emission standard periods shall be: a. For a 3-hour emission standard period, 2 hours of valid data; b. For a 4-hour emission standard period, 3 hours of valid data; c. For an 8-hour emission standard period, 6 hours of valid data; d. For a 12-hour emission standard period, 9 hours of valid data, and e. For a 24-hour emission standard period, 18 hours of valid data.	As specified by regulation	Env-A 808.14
60.	Facility-Wide	Inventories of Regulated Substances	PSNH shall monitor the quantity of regulated substances to ensure that the inventories are maintained below the threshold quantities established by 40 CFR 68.130.	Continuously	40 CFR 68 and 1990 CAA Section 112(r)(1)
61.	SR5	Compliance testing	<u>General Requirements - Performance stack testing</u> a. PSNH must conduct performance testing (or fuel analyses in lieu of performance testing where allowed) on an annual basis no later than 12 months after the previous performance test. A site-specific test plan shall be submitted to DES at least 60 calendar days before the performance test is scheduled to begin for review and approval. The information and conditions listed in Table 6, Items 6, 7, 8, and 9 shall be followed. b. Performance testing may be done less often for PM, HCl, or mercury if the performance tests for the pollutant for at least 3 consecutive years show compliance with the applicable emission limit specified in Table 5. c. If the boiler continues to meet the applicable emission limit for PM, HCl, and/or mercury, performance testing for that pollutant may be conducted every 3 years, but no more than 36	Annually & Any New Fuel Type	Env-A 802, 40 CFR 63.7515, 63.7(c), 63.7520, 63.7521, & 63.7530

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>months after the previous performance test.</p> <p>d. If a performance test shows noncompliance with an emission limit for PM, HCl, or mercury, a performance test for that pollutant must be conducted annually until all performance tests over a consecutive 3-year period demonstrate compliance.</p>		
62.	SR5	Compliance testing	<p><u>General Requirements - Fuel testing</u></p> <p>PSNH shall conduct fuel analyses according to the procedures specified in Table 6, Items 9 and 10:</p> <p>a. During each compliance performance stack test; and</p> <p>b. Fuel analysis must be conducted before burning any new fuel type in the boiler.</p>	Every Compliance Performance Test and/or Every new fuel type	40 CFR 63.7510(b), 63.7515 & 63.7521(b)
63.	SR5	Continuous Monitors	<p><u>General Requirements – Continuous Stack Monitors</u></p> <p>a. PSNH shall develop and submit a site-specific monitoring plan to DES for review and approval at least 60-days before the performance test of the CMS, and shall contain the information and conditions listed in Table 6, Item 12.</p> <p>b. PSNH shall conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.</p> <p>c. Except for monitor malfunctions, associated repairs, and required QA/QC (including calibration checks, required zero, and span adjustments), PSNH must continuously monitor (or collect data at all required intervals) at all times that the affected source is operating.</p>	Annually	Env-A 808, 40 CFR 63.8, & 63.7505, 63.7525
64.	SR5	Sorbent Injection	<p><u>General Requirements – Solid Sorbent Injection</u></p> <p>a. PSNH shall install, calibrate, operate, and maintain a device to measure the sorbent injection rate according to the specification listed in Table 6, Item 13.</p> <p>b. During each planned outage, calibrate the device in accordance with the manufacturer’s procedures and specifications.</p>	Every Compliance Test and Each Planned Outage	40 CFR 63.7520(d) & 63.7525(h)
65.	SR5	HCl	<p><u>Demonstration of Compliance with HCl Emission Limitation – Fuel-based Alternative</u></p> <p>a. PSNH may demonstrate compliance with the HCl emission limit specified in Table 5, Item 21 following the procedures set forth in Table 6, Item 11;</p> <p>b. If compliance with the HCl emission limit cannot be demonstrated through fuel testing, PSNH must demonstrate compliance through performance testing within 60-days of burning the new fuel</p>	Every 5 years, and any new fuel type	40 CFR 6.7530(d) & 63.7540(a)

**Table 7 – Monitoring and Testing Requirements**

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			type, or mixture, as specified in Table 6, Items 6, 7, 8, and 9. New solid sorbent injection operating limits must also be established according to the procedures specified in Table 6, Item 13.		
66.	SR5	Mercury	<u>Demonstration of Compliance with Mercury Emission Limit – Fuel Based Alternative</u> a. PSNH may demonstrate compliance with the mercury emission limit specified in Table 5, Item 22 following the procedures set forth in Table 6, Item 11; b. If compliance with the mercury emission limit cannot be demonstrated through fuel testing, PSNH must demonstrate compliance through performance testing within 60-days of burning the new fuel type, or mixture, as specified in Table 6, Items 6, 7, 8, and 9. New solid sorbent injection operating limits must also be established according to the procedures specified in Table 6, Item 13.	Every 5 years and any new fuel type	40 CFR 63.7530(d)
67.	SR5	Carbon Monoxide Monitoring	<u>Continuous Emission Monitoring System</u> PSNH shall: a. Certify, operate and maintain the CEM in accordance with the applicable requirements of 40 CFR 60 Appendix B, Appendix F, and Env-A 808; b. Perform quarterly gaseous monitoring audits (i.e. cylinder gas audits, and relative accuracy audits); c. Perform annual gaseous monitoring audits (i.e. relative accuracy test audits [RATA]); and d. Continuously operate the CEMS monitor(s) according to the site-specific monitoring plan as specified in Table 8, Item 6.	Continuously	Env-A 808 40 CFR 63.7525(a), 63.7505(d), 63.7540(a), 63.6(e)(3) 63.8 & 60.8
68.	SR5-PC2	Sorbent Injection Monitoring	<u>Continuous Monitoring of Sorbent Injection Rate</u> a. At least annually, PSNH shall calibrate the solid sorbent injection system and device monitor in accordance with the manufacturer’s procedures and specifications. b. PSNH shall collect sorbent injection rate information according to the following: i) The data shall be reduced to 3-hour block averages; and ii) The 3-hour average sorbent injection rate shall be maintained at or above the operating limit established during the performance test.	Continuously	40 CFR 63.7525(h)
69.	SR5	Continuous Opacity Monitor	<u>Continuous Opacity Monitor</u> PSNH shall: a. Maintain and operate the COM in accordance with the site-specific monitoring plan submitted pursuant to the requirements in Table 8, Item 8,	Continuously	Env-A 808 40 CFR 63.7525(b) & 60.13

Table 7 – Monitoring and Testing Requirements					
Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			<p>and the requirements of 40 CFR 60.13, Appendix B Performance Specification 1 and Env-A 808;</p> <p>b. Check the zero, span and calibration drift at least once daily according to the sit-specific monitoring plan as specified in Table 6, Item 12; and</p> <p>c. Conduct annual performance testing in accordance with the requirements of 40 CFR 60.13, Appendix B Performance Specification 1, and Env-A 808.</p>		

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#### D. Recordkeeping Requirements

PSNH is subject to the Recordkeeping requirements as contained in Table 8 below:

Table 8 – Applicable Recordkeeping Requirements				
Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
1.	<u>NSPS Startup, Shutdown, Malfunction Records.</u> PSNH shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility; any malfunction of the air pollution control equipment; or any periods during which a CEMs or monitoring device is inoperative.	For each startup, shutdown, or malfunction	SR5	40 CFR 60.7 (b)
2.	<u>Retention of NSPS Records.</u> PSNH shall maintain a file of all measurements, including continuous monitoring systems, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR 60 Subpart Da and Subpart Y recorded in a permanent form suitable for inspection.	All NSPS records to be maintained for 5 years	SR5	40 CFR 60.7 (f)
3.	<u>General Recordkeeping Requirements</u> PSNH shall keep the following records: <ol style="list-style-type: none"> <li>A copy of each notification and report submitted, including:               <ol style="list-style-type: none"> <li>Notification of Compliance Status; and</li> <li>Semiannual compliance report;</li> </ol> </li> <li>Records of all performance tests, fuel analyses, and CMS performance evaluations and opacity and visible emissions observations; and</li> <li>Records must be in a form suitable and readily available for expeditious review.</li> </ol>	Records to be maintained for 5 years	SR5	40 CFR 63.7555, & 63.10(b)(2)(viii)
4.	<u>Startup Shutdown Malfunction Plan (SSMP)</u> PSNH shall develop a written startup, shutdown malfunction plan which describes in detail the following: <ol style="list-style-type: none"> <li>Procedures for operating and maintaining the source during periods of startup shutdown and malfunction;</li> <li>The program of corrective actions for malfunctioning</li> </ol>	Within 120 days of initial startup	SR5	40 CFR 63.7505(e) & 63.6(e)(3)

Table 8 – Applicable Recordkeeping Requirements				
Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
	processes and air pollution control and monitoring equipment used to comply with the operational and emission limitations specified in Table 5.			
5.	<u>Fuel Type and Use</u> PSNH shall record: <ol style="list-style-type: none"> <li>The quantity of each type of fuel used during the reporting period;</li> <li>The fuel type;</li> <li>For coal only, the ash content;</li> <li>For coal only, the sulfur content as percent sulfur by weight of fuel and pounds per million BTU gross heat content;</li> <li>For natural gas only, sulfur content as percent sulfur by weight of fuel or in grains per 100 cubic feet of fuel;</li> <li>For natural gas only, hours of operation of each fuel combustion device while operating with each type of gaseous fuel, so the distribution of fuel among each combustion device can be estimated.</li> <li>All calculations and supporting documentation of maximum chlorine and mercury fuel input, that were done to demonstrate continuous compliance with the HCl and mercury emissions limits;</li> <li>The calculated MMBtu/ton of fuel; and</li> <li>If more than one type of fuel is used, data on each fuel type shall be recorded separately.</li> </ol>	Maintain on a continuous basis <sup>16</sup>	SR5	Env-A 901.03 Env-A 903.03(a)(1) Env-A 903.03(a)(2) Env-A 903.03(a)(4) & Env-A 903.03(b)  40 CFR 63.7535, 63.7555, & 63.7540
6.	<u>Continuous Emission Monitoring System – CO</u> PSNH shall: <ol style="list-style-type: none"> <li>Develop a site-specific monitoring plan as specified in Table 5, Item 29 and Table 8, Item 10;</li> <li>Maintain records of all quarterly, and annual audits required pursuant to Table 7, Item 67 requirements;</li> <li>Previous versions of performance evaluation plans;</li> <li>Record each period during which the CMS malfunctioned or was inoperative, including out-of-control periods;</li> <li>Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of start-up, shut down or malfunction, or during another period;</li> <li>Maintain records of calibration, maintenance and repair of the CEMS;</li> <li>The CEMS data must be reduced as specified in §63.8(g)(2);</li> <li>Calculate and record a 30-day rolling average emission rate on a daily basis. A new 30-day rolling average emission rate is calculated as the average of all of the hourly CO emission data for the preceding 30 operating days;</li> <li>Data recorded during periods of monitoring malfunctions, associated repairs, out-of-control periods, required quality</li> </ol>	Maintain on a continuous basis	SR5	40 CFR 63.8(g)(2), 63.10(b)(2), 63.7525(a) & 63.7535(a)(9)

<sup>16</sup> This condition has streamlined the recordkeeping requirements of Part Env-A 903.03 and 40 CFR 63 Subpart DDDDD. The records required under Env-A 903.03 (items 6(a)-(e) and 6(g)-(h) above) shall be maintained on a monthly and a 12-month rolling average basis. 40 CFR 63 Subpart DDDDD requires items 6(a),(b),(f),(g), and (h) to be maintained on a continuous basis.

**Table 8 – Applicable Recordkeeping Requirements**

Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
	<p>assurance or control activities or when the boiler is operating at less than 50% of its rated capacity cannot be included for calculation of the 30-day rolling average; Data collected during all other periods must be used in assessing compliance; and</p> <p>j. Any period for which the monitoring system is out of control and data are not available for required calculations, constitutes a deviation from the monitoring requirements.</p>			
7.	<p><u>Occurrences of Startup Shutdown or Malfunction</u></p> <p>PSNH shall maintain/record:</p> <ol style="list-style-type: none"> <li>Actions taken during startup shutdown or malfunction which are consistent with the procedures specified in the SSMP to demonstrate that the procedures were followed;</li> <li>Actions taken during startup, shut down or malfunction which were not consistent with the procedures specified in the SSMP and an applicable emission limit specified in Table 5 was exceeded;</li> <li>The duration and occurrence of each startup shutdown and malfunction of operation and each malfunction of the air pollution control and monitoring equipment;</li> <li>Maintain a current copy of the SSMP and make the plan available upon request by DES or EPA; and</li> <li>All required maintenance performed on the air pollution control and monitoring equipment;</li> <li>Maintain previous versions of the SSMP for a period of 5 years after revision of the plan.</li> </ol>	<p>Maintain on a continuous basis</p>	SR5	<p>40 CFR 63.7575(e), 63.10(2), &amp; 63.6(e)(3)(iii) through (v)</p>
8.	<p><u>Continuous Emission Monitoring System - Continuous Opacity Monitoring System</u></p> <p>PSNH shall:</p> <ol style="list-style-type: none"> <li>Develop a site-specific monitoring plan as specified in Table 5, Item 31, and Table 8, Item 10;</li> <li>Maintain records of all quarterly, and annual audits required pursuant to Table 7, Item 69 requirements;</li> <li>Maintain records of calibration, maintenance and repair of the COMS;</li> <li>Maintain monitoring data for COMS collected during performance evaluations;</li> <li>Previous versions of performance evaluation plans;</li> <li>Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of start-up, shut down or malfunction, or during another period;</li> <li>Records of all monitoring data and calculated averages for applicable operating limits to show continuous compliance with the emission limit for opacity;</li> <li>The COMS data must be reduced as specified in §63.8(g)(2);</li> <li>Identify periods the COMS is out of control including periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual</li> </ol>	<p>Maintain on a continuous basis</p>	SR5	<p>40 CFR 63.6(h)(7)(i) 63.7525(b)</p>

**Table 8 – Applicable Recordkeeping Requirements**

Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
	zero alignment audit; and j. Determine and record all 6-minute averages, and 1-hour block averages, collected for periods during periods when the COMS is <u>not</u> out of control.			
9.	<u>Site-Specific Fuel Analysis Plan</u> PSNH shall develop and submit to DES and EPA a site-specific fuel analysis plan for review and approval according to the following procedures: a. The identification of all fuel types anticipated to be burned in the boiler; b. For each fuel type, the notification of whether PSNH or the fuel supplier will conduct the fuel analysis; c. For each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the procedures are different from those specified in Table 7 Item 62; and d. Determine the concentrations of the pollutants in the fuel in units of pounds per million Btu of each composite sample for each fuel type according to the procedures specified in Table 6 Item 9.	180 days prior to testing		40 CFR 63.7521(b)
10.	<u>Site-Specific Monitoring Plan</u> PSNH shall develop and submit to DES and EPA a site-specific monitoring plan for the CEMS and COMS for review and approval and shall: a. Contain sufficient information to demonstrate that all unit CO emissions, and/or opacity are monitored and reported, including: i) Daily calibration drift assessment; ii) Quarterly performance audits; and iii) An annual zero alignment audit for each COMS. b. Update the monitoring plan whenever PSNH makes a replacement, modification or change that could affect the CEMS or COMS; c. Review the QA/QC plan and all data generated by its implementation at least one each year; d. Revise or update the QA/QC plan, as necessary, based on the results of the annual review by conducting the following: i) Documenting any changes made to the CEMS or COMS or changes to any information provided in the monitoring plan; ii) A schedule of, and description of, all maintenance activities that are required by the CEMS or COMS manufacturer, that might have an effect on the operation of the system; iii) Description of how the audits and testing required by this permit will be performed; iv) Examples of the reports that will be used to document the audits and tests required by this permit; and	60 days prior to performance testing	SR5	Env-A 808 & 40 CFR 63.7505(d)

**Table 8 – Applicable Recordkeeping Requirements**

Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
	v) Make the revised QA/QC plan available for on-site review by DES or EPA at any time.			
11.	<p><u>Monitoring Plan and QA/QC Plan:</u></p> <p>a. PSNH shall prepare and maintain a monitoring plan for the CEMS and COMS, which contains sufficient information to demonstrate that all unit SO<sub>2</sub> emissions, NO<sub>x</sub> emissions, CO<sub>2</sub> emissions and opacity are monitored and reported.</p> <p>b. The Permittee shall prepare and maintain monitoring plans for other approved monitoring methods, which contain sufficient information to demonstrate that all unit NO<sub>x</sub> emissions are monitored and reported.</p> <p>c. PSNH shall update the monitoring plan whenever PSNH makes a replacement, modification or change that could affect the CEMS or COMS or other approved monitoring method.</p> <p>d. PSNH shall review the QA/QC plan and all data generated by its implementation at least once each year.</p> <p>e. PSNH shall revise or update the QA/QC plan, as necessary, based on the results of the annual review by conducting the following:</p> <ul style="list-style-type: none"> <li>i) Documenting any changes made to the CEM or the monitoring method or changes to any information provided in the monitoring plan;</li> <li>ii) Including a schedule of, and describing, all maintenance activities that are required by the CEM manufacturer or that might have an effect on the operation of the system;</li> <li>iii) Describing how the audits and testing required by this part will be performed; and</li> <li>iv) Including examples of the reports that will be used to document the audits and tests required by this part;</li> </ul> <p>v) Make the revised QA/QC plan available for on-site review by the division at any time; and</p> <p>vi) Within 30 days of completion of the annual QA/QC plan review, certify in writing that the owner or operator will continue to implement the source's existing QA/QC plan or submit in writing any changes to the plan and the reasons for each change.</p> <p>f. The QA/QC plan shall be considered an update to the CEM monitoring plan required by Env-A 808.04.</p> <p>g. Pursuant to Env-A 3212.13(a) and Env-A 2910.09, the units subject to acid rain emission limitations (SR4, SR5, SR6) shall comply with the requirements of 40 CFR 75.62, except the monitoring plan shall also include all of the information required by 40 CFR 75, Subpart H.</p> <p>h. Pursuant to Env-A 3212.13(b), a unit not subject to acid rain emission limitations (SRCT) shall comply with the requirements of 40 CFR 75.62, except the monitoring plan shall only include the information required by 40 CFR 75, Subpart H.</p> <p>i. Pursuant to 40 CFR 75.73(c)(3), the monitoring plan for a unit not subject to acid rain emission limitations (SRCT) shall include the provisions of 40 CFR 75.53(e)(1),</p>	Whenever a change occurs that could affect monitoring method or annually, whichever is more frequent	SR5	40 CFR 75.53 (a), (b), (e), and (f) and 75.73(c) and Env-A 808.06 and 3212.13 and 2910.09

**Table 8 – Applicable Recordkeeping Requirements**

Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
	75.53(f)(1)(i), (f)(2)(i), and (f)(4) in electronic format and 40 CFR 75.53(e)(2), 75.53(f)(1)(ii), and (f)(2)(ii) in hardcopy format.			
12.	<u>CEM, COMS and Other Approved Monitoring Methods Recordkeeping Requirements:</u> a. PSNH shall record and maintain the information required pursuant to 40 CFR 75.57, 75.58, 75.59, and 75.73(b), which includes the certification, quality assurance, and quality control records. b. PSNH shall record and maintain CEMS and COMS records according to the most stringent requirements of Env-A 808 and 40 CFR 75.	As specified by regulation	SR5	40 CFR 75.57, 75.58, 75.59, and 75.73 and Env-A 3212 and Env-A 903.04 (a) and Env-A 800 and 40 CFR 75
13.	<u>General NO<sub>x</sub> Recordkeeping Requirements:</u> PSNH shall record and maintain the following information: a. Identification of each fuel burning device; b. Operating schedule for each fuel burning device identified in Condition a above, including: i) Hours of operation per calendar month; ii) Days of operation per calendar month; iii) Number of weeks of operation; iv) Heat input rate in million BTUs per hour; and v) The following NO <sub>x</sub> emission data: A) Actual NO <sub>x</sub> emissions from each combustion device identified in (a) above for: 1. Each calendar year, in tons; and 2. A high ozone season day during that calendar year, in pounds per day; and B) The emission factors and the origin of the emission factors used to calculate the NO <sub>x</sub> emissions.	Annually and as applicable	SR5	Env-A 905.02
14.	<u>Recordkeeping Requirements for Add-On NO<sub>x</sub> Control Equipment:</u> PSNH shall record and maintain the following information: a. Air pollution control device identification number, type, model number, and manufacturer; b. Installation date; c. Unit(s) controlled; d. Type and location of the capture system, capture efficiency percent, and method of determination; e. Information as to whether the air pollution control device is always in operation when the fuel burning device it is serving is in operation; f. Destruction or removal efficiency of the air pollution control equipment, including the following information: i) Destruction or removal efficiency, in percent; ii) Current primary and secondary equipment control information codes; iii) Date tested; and iv) Method of determining destruction or removal efficiency, if not tested.	Maintain at the facility at all times	SR4, SR5, SR6	Env-A 905.03
15.	<u>Delivery Ticket and Sulfur Analysis Records for Coal:</u> a. PSNH shall maintain delivery tickets from each coal supplier for each shipment of coal received. The delivery	For each delivery of coal	SR5	Env-A 806.05

**Table 8 – Applicable Recordkeeping Requirements**

Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
	<p>tickets shall be in a form suitable for inspection and available to the DES and/or EPA upon request. Each delivery ticket shall indicate the following:</p> <ul style="list-style-type: none"> <li>i) The name of the fuel supplier;</li> <li>ii) The address of the fuel supplier;</li> <li>iii) The telephone number of the fuel supplier;</li> <li>iv) The type of fuel delivered;</li> <li>v) The quantity of coal delivered;</li> <li>vi) The date of delivery;</li> <li>vii) The maximum percent sulfur by weight of the coal delivered or the lb sulfur/MMBTU of coal;</li> <li>viii) The weight percent ash content of the coal; and</li> <li>ix) The gross heat content of the coal (in Btus per pound).</li> </ul> <p>b. If the delivery tickets do not contain sulfur content of fuel delivered, PSNH shall provide other documentation from the fuel supplier with the above information or perform testing in accordance with appropriate ASTM test methods to determine compliance with the sulfur content limitation provisions in Env-A 1606 for solid fuels.</p>	<p align="center" style="font-size: 48pt; opacity: 0.5;">draft</p>		
16.	<p><u>Natural Gas Utilization Records:</u> PSNH shall maintain billing tickets for each natural gas supplier. The billing tickets shall be in a form suitable for inspection and available to the DES and/or EPA upon request. Each billing ticket shall indicate the following:</p> <ul style="list-style-type: none"> <li>a. The name of the fuel supplier;</li> <li>b. The address of the fuel supplier;</li> <li>c. The telephone number of the fuel supplier;</li> <li>d. The type of fuel delivered; and</li> <li>e. The quantity of natural gas used.</li> </ul>		SR5	Env-A 903.03(a)(4)
17.	<p><u>General Recordkeeping Requirements for Process Operations:</u> PSNH shall maintain the following:</p> <ul style="list-style-type: none"> <li>a. Monthly records of raw material utilization (coal) for each of the crusher systems and for the coal fed to SR5.</li> <li>b. Monthly records of the amount of urea used in the SNCR system.</li> <li>c. Monthly records of the amount of sorbent injected into the boiler</li> </ul>		SRCC SR-PC1 SR-PC2	Env-A 903.02
18.	<p><u>Coal Crusher Records:</u> PSNH shall maintain the following information, which may be included in the facility work management system:</p> <ul style="list-style-type: none"> <li>a. The monthly visible emission observation results;</li> <li>b. A log of repairs made to the coal crusher enclosure. The log shall include the following: <ul style="list-style-type: none"> <li>i) The date a problem was observed;</li> <li>ii) The date of the repair;</li> <li>iii) A description of the problem; and</li> <li>iv) The corrective actions taken.</li> </ul> </li> </ul>		SRCC	Env-A 906.01
19.	<p><u>Certificate of Representation:</u> PSNH shall complete and retain a certificate of representation for a designated representative or an alternate designated representative including the elements pursuant to 40 CFR 72.24, <i>Certificate of representation</i>.</p>		SR4, SR6, SR5	40 CFR 72.24

Table 8 – Applicable Recordkeeping Requirements				
Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
20.	<u>Record Retention:</u> PSNH shall retain the records required by this permit on file for a minimum of 5 years except the certificate of representation for the designated representatives shall be kept beyond the 5-year period.	Retain for a minimum of 5 years or as specified	Facility wide	Env-A 902.01 (a)
21.	<u>Regulated Toxic Air Pollutant Records:</u> PSNH shall maintain records in accordance with the applicable method used to demonstrate compliance pursuant to Env-A 1406.	Maintain at facility at all times	All devices subject to RSA 125-I and Env-A 1400	Env-A 902.01 (c)

draft

### E. Reporting Requirements

PSNH is subject to the federally enforceable reporting requirements identified in Table 9 below:

Table 9: Applicable Reporting Requirements				
Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
1.	<u>Notification of Initial Performance Test for NO<sub>x</sub> and SO<sub>2</sub>.</u> The initial performance test required under 40 CFR 60.8, is the only test in which PSNH shall provide at least a 30 days notice to EPA/DES, unless otherwise specified by EPA/DES.	30 days prior to initial performance test for NO <sub>x</sub> and SO <sub>2</sub>	SR5	40 CFR 60.46a (f)
2.	<u>NSPS Performance Test Results.</u> For SO <sub>2</sub> , NO <sub>x</sub> , and PM emissions, PSNH shall submit the performance test data from the initial performance test and from the performance evaluation of the continuous monitors (including the transmissometer) to EPA and DES.	Within 60 days of completing the performance tests	SR5	40 CFR 60.49a (a) and 60.8 (a)
3.	<u>NSPS SO<sub>2</sub> and NO<sub>x</sub> Reports.</u> a. For SO <sub>2</sub> and NO <sub>x</sub> , PSNH shall report the following information to EPA and DES for each 24-hour period: i) Calendar date. ii) The average SO <sub>2</sub> and NO <sub>x</sub> emission rates (ng/J or lb/MMBtu) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and a description of corrective actions taken. iii) Percent reduction of the potential combustion concentration of SO <sub>2</sub> for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and a description of corrective actions taken. iv) Identification of boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 18 hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken. v) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO <sub>x</sub> only), emergency conditions (SO <sub>2</sub>	Quarterly submitted no later than 30 days after the end of the calendar quarter	SR5	40 CFR 60.49a (b) and (j)

**Table 9: Applicable Reporting Requirements**

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	<p>only), or other reasons, and justifications for excluding data for reasons other than startup shutdown, malfunction, or emergency conditions.</p> <p>vi) Identification of “F” factor used for calculations, method of determination, and type of fuel combusted.</p> <p>vii) Identification of times when hourly averages have been obtained based on manual sampling methods.</p> <p>viii) Identification of the times when the pollutant concentration exceeded full span of the CEMs.</p> <p>ix) Description of any modifications to the CEMs which could affect the ability of the CEMs to comply with the Performance Specifications 2 or 3 of 40 CFR 60.</p> <p>b. Pursuant to 40 CFR 60.49a (j), PSNH may submit the reports electronically instead of submitting the written reports. The format of the electronic reports must be approved by DES. Each electronic report must be accompanied by a certification statement from PSNH, indicating whether compliance with the applicable emission standards and minimum data requirements were achieved during the reporting period.</p>	draft		
4.	<p><u>NSPS Reports for Periods when Minimum Data Availability Requirements are not met.</u> When the minimum emissions data required pursuant to 40 CFR 60.47a is not obtained for any 30 successive boiler operating days, PSNH shall report to EPA and DES the following information obtained by following the applicable procedures of Section 7 of Method 19:</p> <p>a. The number of hourly averages available for outlet emission rates and inlet emission rates, as applicable.</p> <p>b. The standard deviation of hourly averages for outlet emission rates and inlet emission rates, as applicable.</p> <p>c. The lower confidence limit for the mean outlet emission rate and the upper confidence limit for the mean inlet emission rate, as applicable.</p> <p>d. The applicable potential combustion concentration.</p> <p>e. The ratio of upper confidence limit for the mean outlet emission rate and the allowable emission rate, as applicable.</p>	Semi-Annually postmarked by the 30 <sup>th</sup> day following the end of each 6-month period when minimum data availability requirements are not met	SR5	40 CFR 60.49a (c) and (i)
5.	<p><u>NSPS Reports for Emergency Conditions.</u> If any standards pursuant to 40 CFR 60.43a are exceeded during an emergency condition because of control system malfunction, PSNH shall submit a signed statement with the following information:</p> <p>a. An indication if emergency conditions existed and requirements of 40 CFR 60.46a (d) were met during each period;</p> <p>b. The time periods when the emergency conditions existed;</p> <p>c. Electrical output and demand on the PSNH’s electric utility system and the affected facility;</p> <p>d. Amount of power purchased from interconnected neighboring utility companies during the emergency period;</p> <p>e. Percent reduction in emissions achieved;</p> <p>f. Atmospheric emission rate (ng/J and lb/MMBtu) and of the pollutant discharged; and</p>	Semi-Annually postmarked by the 30 <sup>th</sup> day following the end of each 6-month period when any standards pursuant to 40 CFR 60.43a are exceeded during an emergency condition because of control system malfunction	SR5	40 CFR 60.49a (d) and (i)

**Table 9: Applicable Reporting Requirements**

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	g. Actions taken to correct control system malfunction.			
6.	<p><u>NSPS Report for Fuel Pretreatment Credit.</u> If PSNH claims the fuel pretreatment credit toward the SO<sub>2</sub> emission standard pursuant to 40 CFR 60.43a, PSNH shall submit a signed statement to EPA and DES with the following information:</p> <ol style="list-style-type: none"> <li>An indication of what percentage cleaning credit was taken for the calendar quarter, and whether the credit was determined in accordance with the provisions of 40 CFR 60.48a and Method 19; and</li> <li>The quantity, heat content, and date each pretreated fuel shipment was received during the previous quarter;</li> <li>The name and location of the pretreatment facility; and</li> <li>The total quantity and total heat content of all fuels received at Schiller Station during the previous quarter.</li> </ol>	Semi-Annually postmarked by the 30 <sup>th</sup> day following the end of each 6-month period	SR5	40 CFR 60.49a (e) and (i)
7.	<p><u>NSPS Reports for periods when opacity, SO<sub>2</sub>, and NO<sub>x</sub> emissions data are not available.</u> When opacity, SO<sub>2</sub>, and NO<sub>x</sub> emissions data are not available, PSNH shall submit a signed statement indicating if any changes were made in the operation of the emission control system during the period of data unavailability. PSNH shall compare the operations of the control system and the affected facility during periods of data unavailability with the operations of the control system and the affected facility before and following the period of data unavailability.</p>	Semi-Annually postmarked by the 30 <sup>th</sup> day following the end of each 6-month period	SR5	40 CFR 60.49a (f) and (i)
8.	<p><u>NSPS Reports.</u> PSNH shall submit a signed statement indicating whether the following occurred:</p> <ol style="list-style-type: none"> <li>The required CEMs calibration, span, and drift checks or other periodic audits have been performed as specified.</li> <li>The data used to show compliance was obtained in accordance with the approved methods and procedures and is representative of plant performance.</li> <li>The minimum data requirements have been met; or the minimum data requirements have not been met for errors that were unavoidable;</li> <li>Compliance with the standards has been achieved during the reporting period.</li> </ol>	Semi-Annually postmarked by the 30 <sup>th</sup> day following the end of each 6-month period	SR5	40 CFR 60.49a (g) and (i)
9.	<p><u>NSPS Excess Opacity Reports.</u></p> <ol style="list-style-type: none"> <li>For the purposes of the reports required pursuant to 40 CFR 60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standard pursuant to 40 CFR 60.42a (b). Opacity levels in excess of the applicable opacity standard and the date of such excesses shall be submitted to EPA and DES each calendar quarter.</li> <li>Pursuant to 40 CFR 60.49a (j), PSNH may submit the reports electronically instead of submitting the written reports. The format of the electronic reports must be approved by DES. Each electronic report must be accompanied by a certification statement from PSNH, indicating whether compliance with the applicable emission standards and minimum data requirements were achieved during the reporting period.</li> </ol>	Quarterly submitted no later than 30 days after the end of the calendar quarter	SR5	40 CFR 60.49a (h) and (j)
10.	<u>NSPS Notification Requirements.</u> PSNH shall submit written	As specified by	SR5	40 CFR 60.7 (a)

**Table 9: Applicable Reporting Requirements**

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	notification or if acceptable by EPA/DES and PSNH, electronic notification as follows: a. Notification of the date construction is commenced, postmarked no later than 30 days after such date. b. Notification of the actual date of initial startup postmarked within 15 days of such date. c. Notification of the date upon which demonstration of the continuous monitoring systems performance commences in accordance with 40 CFR 60.13, postmarked not less than 30 days prior to such date. d. Notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11 (e)(1). This notification shall also include, if appropriate, a request for EPA/DES to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. e. A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by 40 CFR 60.8 instead of Method 9 observation data as allowed by 40 CFR 60.11(e)(5). This notification shall be postmarked not less than 30 days prior to the date of the performance test.	regulation		
11.	<u>NSPS Excess Emission Reports.</u> PSNH shall submit excess emissions and monitoring systems performance reports and/or summary reports forms to EPA and DES. The written excess emissions reports shall include the following information: a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13 (h), any conversion factor used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period. b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the facility, the nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted. c. The date and time identifying each period during which the continuous monitoring systems was inoperative except for zero and span checks and the nature of the system repairs or adjustments. d. When no excess emissions have occurred or the continuous monitoring systems have not been operative, repaired, or adjusted, such information shall be stated in the report.	Semiannually postmarked by the 30 <sup>th</sup> day following the end of each 6-month period, except quarterly for SO <sub>2</sub> , NO <sub>x</sub> , and opacity or on a more frequent basis as determined by EPA and/or DES	SR5	40 CFR 60.7 (c)
12.	<u>NSPS Summary Report.</u> The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by EPA and/or DES. One summary report form shall be submitted for each pollutant monitored at the facility. a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and the continuous monitoring systems downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the	Semiannually postmarked by the 30 <sup>th</sup> day following the end of each 6-month period, except quarterly for SO <sub>2</sub> , NO <sub>x</sub> , and opacity or on a more frequent basis as determined by	SR5	40 CFR 60.7 (d)

**Table 9: Applicable Reporting Requirements**

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	<p>summary report form shall be submitted and the excess emissions report specified in 40 CFR 60.7(c) need not be submitted unless requested by EPA and /or DES.</p> <p>b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period and or the total continuous monitoring system downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emissions report specified in 40 CFR 60.7(c) shall both be submitted.</p> <p>c. The summary report form shall describe any changes since last quarter in the continuous monitoring systems, process, or controls, and shall contain a statement verifying the truth, accuracy, and completeness of the information.</p>	EPA and/or DES		
13.	<u>NSPS Reduced Frequency of Reporting.</u> For excess emissions and monitoring systems performance reports and summary reports required to be submitted on a quarterly or more frequent basis, PSNH may request a reduced frequency of reporting to semiannually, if the requirements of 40 CFR 60.7 (e) are met.	If reduced frequency of quarterly (or more frequent) reporting is desired	SR5	40 CFR 60.7 (e)
14.	<p><u>Notification of Compliance Status</u></p> <p>PSNH shall submit a Notification of Compliance Status according to §63.9(h)(2)(ii), before the close of business on the 60th day following completing the initial compliance demonstration. This reports shall include:</p> <p>a. All performance test results;</p> <p>b. All fuel analysis results;</p> <p>c. Identification of the affected source including the identification of which subcategory the source is in;</p> <p>d. The capacity of the source;</p> <p>e. A description of the add-on controls used on the source;</p> <p>f. A description of the fuels burned, along with a justification for the fuel(s) burned during the performance test;</p> <p>g. Summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits;</p> <p>h. Identification of either the performance stack testing or the alternative fuel analysis method to demonstrate compliance with the emission limitations for mercury and/or HCl specified in Table 5;</p> <p>i. A signed certification that all applicable emission limits and work practice standards have been met;</p> <p>j. A summary of the CO emission monitoring data and the maximum CO emission levels recorded during the performance test to demonstrate compliance with the conditions specified in Table 5, Item 19; and</p> <p>k. A description of any deviation(s) from any emission limit specified in Table 5, the duration of the deviation and the corrective action taken.</p>	Initial Compliance Performance Demonstration	SR5	Env-A 802, 40 CFR 63.7530(e) & 63.7545(e)
15.	PSNH shall submit a Notification of Intent to conduct a performance test at least 30-days before the performance test is	For every performance test	SR5	40 CFR 63.7(b)(1), &

**Table 9: Applicable Reporting Requirements**

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	scheduled to begin.			63.7545(d)
16.	<u>Performance Testing Reporting</u> PSNH shall submit a report of the results of performance tests, fuel analyses and/or RATA testing within 60 days after completion of the performance tests, fuel analyses, and/or RATA. This reports shall include: <ol style="list-style-type: none"> <li>All test data;</li> <li>All calibration data;</li> <li>Process data agreed upon by DES/EPA and PSNH ;</li> <li>All test results;</li> <li>A description of any discrepancies or problems that occurred during the testing and/or sample analysis;</li> <li>An explanation of how discrepancies and/or problems were treated and their effect on the final results;</li> <li>A list and description of all equations used in the test report, including sample calculations for each equation used;</li> <li>Verification of the operating limits for the boiler.</li> </ol>	For every performance test & Every CMS QA Audit and RATA test	SR5	Env-A 802.11 & 40 CFR 63.7515(g)
17.	PSNH shall submit additional reports, as necessary, for the purpose of demonstrating compliance with all state and federal statues, rules, regulations, and permits.	Annually (no later than April 15 <sup>th</sup> of the following year)	SR5	Env-A 910.01
18.	<u>Semi-annual Compliance Report</u> PSNH shall submit a semiannual compliance report which will contain: <ol style="list-style-type: none"> <li>The company name and address;</li> <li>Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;</li> <li>Date of report and beginning and ending dates of the reporting period;</li> <li>The total fuel used by the affected source for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure;</li> <li>A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable;</li> <li>A signed statement indicating that no new fuel types were burned. Or if a new fuel type was burned, you must submit:               <ol style="list-style-type: none"> <li>Calculations for chlorine, and mercury inputs (Table 6, Item 9) that demonstrate the source is still within the maximum chlorine and/or mercury level established during the pervious performance testing, if compliance with emission limits were demonstrated by stack testing;</li> <li>Calculations for HCl and/or mercury emission rates (Table 6, Items 21 and 22), that demonstrate the source is still meet the emissions limits for HCL and/or mercury for the fuel analysis</li> </ol> </li> </ol>	Semiannually (by July 31 and January 31 of each calendar year)	SR5	Env-A 900 & 40 CFR 63.7550, 63.8(c)(7), & 63.10(d)(5)(i)

**Table 9: Applicable Reporting Requirements**

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	<p>compliance option;</p> <p>g. If there was a startup, shutdown, or malfunction during the reporting period and the actions taken were consistent with the SSMP;</p> <p>h. Revisions to the SSMP and the reasons for each change;</p> <p>i. If there were no deviations from any emission limit, or operating limit specified in this permit, and there were not deviations from the CO limit specified in Table 5, a statement that there were no deviation from the emission limits, operating limits or CO limit standards during the reporting period;</p> <p>j. For each deviation from an emission limitation or operating limit:</p> <p>i) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period;</p> <p>ii) A description of the nature of the deviation and which emission limit, or operating limit from which PSNH deviated; and</p> <p>iii) Information on the number, duration, and cause of deviations, as applicable, and the corrective action taken;</p> <p>k. If there were not periods during which the Continuous Monitoring Systems (CEMS, or COMS) were out of control:</p> <p>i) A statement that there were no periods during which the CMSs were out of control during the reporting period;</p> <p>ii) Within 30-days of completion of the annual CMS QA/QC plan review, certify in writing that the owner or operator will continue to implement the source's existing QA/QC plan or submit in writing, any changes to the plan and the reasons for each change;</p> <p>l. For each CMS deviation:</p> <p>i) The date, and time that each malfunction of a CMS started and stopped, and a description of the nature of the deviation;</p> <p>ii) The date, time, and duration that each CMS was inoperative, except for zero (low level) and high level checks;</p> <p>iii) The date, time, and duration that each CMS was out of control, including the information in §63.8(c)(8);</p> <p>iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period;</p> <p>v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period;</p>			

**Table 9: Applicable Reporting Requirements**

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	<ul style="list-style-type: none"> <li>vi) A breakdown of the total duration of deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes;</li> <li>vii) A summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during the reporting period;</li> <li>viii) An identification of each parameter that was monitored at the affected source for which there was a deviation, including opacity, CO, and operating parameters for control devices;</li> <li>ix) A brief description of each CMS for which there was a deviation;</li> <li>x) The date of the latest CMS certification or audit for the system for which there was a deviation;</li> <li>xi) A description of any changes in CMSs, processes or controls since the last reporting period; and</li> <li>xii) A copy of the annual test report if the annual performance test showed a deviation from the emission limit for PM, a deviation from the HCl emission limit, or a deviation from the mercury emission limit.</li> </ul>			
19.	<p><u>Startup, Shutdown Malfunction Report</u></p> <p>PSNH shall submit a Startup, Shutdown, Malfunction report if there was a startup, shutdown, or malfunction during the reporting period that was not consistent with the SSMP. The report shall contain:</p> <ul style="list-style-type: none"> <li>a. The actions taken for the event;</li> <li>b. The name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy;</li> <li>c. The circumstances of the event;</li> <li>d. The reason for not following the SSMP; and</li> <li>e. Whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.</li> </ul>	Within 2 working days of the occurrence by phone or fax, and a full written report within 7 working days after the end of the event	SR5	40 CFR 63.10(d)(5), 63.7550
20.	<p><u>NOx Reporting Requirements:</u> PSNH shall submit reports of the NOx records kept pursuant to Table 8, Item 13.</p>	Annually (no later than April 15 <sup>th</sup> of the following year)	SR5	Env-A 909.03
21.	<p><u>State Acid Deposition Control Program Reporting Requirements:</u> PSNH shall submit an annual report of the fuel utilization information pursuant to Env-A 903.03 and Table 8, Item 5.</p>	Annually (no later than April 15 <sup>th</sup> of the following year)	SR5	Env-A 907.02
22.	<p><u>CEMS Recertification Notifications and Reports:</u></p> <ul style="list-style-type: none"> <li>a. PSNH shall notify EPA and DES by telephone or in writing and not later than 21 days prior to the first scheduled day of full recertification testing and at least 7 calendar days prior to the first scheduled day of partial recertification testing (when all of the tests are not required). In emergency situations when equipment fails with lost data, PSNH may provide notice within 2 business days following the date when testing is scheduled. If the testing is rescheduled,</li> </ul>	7 days prior to partial recertification, 21 days prior to full recertification, and 45 days after all recertification tests	SR5	40 CFR 75.61 (a)(1), 75.70, 75.63, and 75.73(d) and Env-A 3212 and 2910

**Table 9: Applicable Reporting Requirements**

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	<p>PSNH may notify DES and EPA by telephone or other means within 2 business days prior to the scheduled test date or the revised test date, whichever is earlier.</p> <p>b. Within 45 calendar days after completing all recertification tests, PSNH shall submit to EPA and DES the electronic and hardcopy information contained in 40 CFR 75.63.</p> <p>c. Pursuant to Env-A 3212.14 and Env-A 2910.10, PSNH shall submit an application to DES within 45 days after completing all initial certification or recertification tests including the information required under 40 CFR 75. Subpart H.</p> <p>d. Pursuant to Env-A 2910.07, PSNH shall also submit written notification required pursuant to 40 CFR 75.61 to the ATS administrator.</p> <p>e. Pursuant to Env-A 3212.09, PSNH shall comply with the notification requirements of Env-A 3212.07 for SRCT.</p>			
23.	<p><u>Relative Accuracy Test Audit (RATA) Notification and Reports:</u></p> <p>a. PSNH shall submit written notice to EPA and DES no later than 21 calendar days prior to the first scheduled day of testing. If the testing is rescheduled, PSNH may notify DES and EPA by telephone or other means no later than 24-hours in advance of the new testing date. Pursuant to Env-A 808.07, PSNH shall notify DES at least 30 days prior to the performance of the RATA. DES shall require rescheduling of the RATA if staff necessary to observe the RATA are not available.</p> <p>b. If requested, PSNH shall submit the quality assurance RATA reports to EPA and DES by the later of 45 days after completing a quality assurance RATA or 15 days of receiving the request.</p> <p>c. Pursuant to Env-A 808.05, PSNH shall submit to DES a written report summarizing the performance specification testing within 30 days of the completion of the test.</p> <p>d. Pursuant to Env-A 3212.11, for SRCT, PSNH shall submit written notification to DES only.</p> <p>e. Pursuant to Env-A 2910.07, PSNH shall also submit written notification required pursuant to 40 CFR 75.61 to the ATS administrator.</p>	21 calendar days prior to RATA	SR5	40 CFR 75.61 (a)(5) and 75.73(d) and Env-A 3212.11 and 2910 and 808.05 and 808.07(c) and (d)
24.	<p><u>Performance Specification Testing Reports:</u></p> <p>a. DES shall be notified of the date or dates of the performance specification testing at least 30 days prior to the scheduled dates.</p> <p>b. PSNH shall submit to DES a written report summarizing the testing within 30 days of the completion of the test.</p>	30-day notice to DES prior to test; test report to DES 30 days after the test	SR5	Env-A 808.05
25.	<p><u>General Audit Notification Requirements:</u> PSNH shall notify DES at least 2 weeks prior to any planned audit or test procedure except for RATAs, where PSNH shall provide at least 30 days notice prior to the performance of the RATA.</p>	2 weeks prior to any planned audit or test procedure and at least 30 days prior to the RATA.	SR5	Env-A 808.07(c) and (e)
26.	<p><u>Monitoring and QA/QC Plan Submittals:</u> PSNH shall submit to EPA and DES a complete, electronic, up-to-date monitoring plan at the time of recertification application</p>	In the recertification application, in each	SR5	40 CFR 75.62 and 75.73(d) and (e) and Env-

**Table 9: Applicable Reporting Requirements**

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	submission and in each electronic quarterly report, and whenever an update of the electronic monitoring plan information is required.	electronic quarterly report, and whenever an update of the electronic monitoring plan information is required		A 808.04, 808.06, 3212 and 2910
27.	<p><u>Quarterly Reports:</u> PSNH shall submit to DES and EPA in electronic format or other format as approved by DES and/or EPA 30 calendar days after the end of the calendar quarter the information contained in 40 CFR 75.64(a), 40 CFR 75.73(f), 40 CFR 75.74, Env-A 2912, Env-A 3212, Env-A 3214, Env-A 808.11, and Env-A 808.13 and the following information:</p> <ol style="list-style-type: none"> <li>Written report of opacity, SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub> emissions as calculated by the CEMS.</li> <li>The 24-hour averages of the following shall be reported, whether or not an excess emission has occurred: <ol style="list-style-type: none"> <li>SO<sub>2</sub> lb/MMBTU, SO<sub>2</sub> ppm, and SO<sub>2</sub> lb/hr;</li> <li>NO<sub>x</sub> lb/MMBTU, NO<sub>x</sub> ppm, and NO<sub>x</sub> lb/hr;</li> <li>Percent CO<sub>2</sub> and CO<sub>2</sub> lb/hr as measured by continuous monitor/recorder;</li> <li>Stack volumetric flowrate (in kscfm);</li> <li>Load (in MW);</li> <li>Steam flow (in klbs/hr);</li> <li>Heat input (MMBTU/hr); and</li> <li>Opacity (in percent).</li> </ol> </li> <li>Excess emission data recorded by the CEM system, including the following: <ol style="list-style-type: none"> <li>The date and time of the beginning and ending of each of excess emissions;</li> <li>The magnitude of each excess emission;</li> <li>The specific cause of the excess emission; and</li> <li>The corrective action taken.</li> </ol> </li> <li>If no excess emissions have occurred, a statement to that effect;</li> <li>For gaseous emission monitoring systems, the daily averages of the measurements made and emissions rates calculated.</li> <li>A statement as to whether the CEM system was inoperative, repaired, or adjusted during the reporting period;</li> <li>If the CEM system was inoperative, repaired, or adjusted during the reporting period, the following information: <ol style="list-style-type: none"> <li>The date and time of the beginning and ending of each period when the CEM was inoperative;</li> <li>The reason why the CEM was not operating;</li> <li>The corrective action taken; and</li> </ol> </li> <li>The percent data availability calculated in accordance with Env-A 808.10 for each flow, diluent, or pollutant analyzer in the CEM system;</li> <li>The date and time beginning and ending each period when the source of emissions which the CEM system is monitoring was not operating;</li> <li>When calibration gas is used, the following information:</li> </ol>	30 calendar days after the end of the calendar quarter	SR5	40 CFR 75.64, 40 CFR 75.73(f), 40 CFR 75.74, 40 CFR 75.74, Env-A 2910, Env-A 2911, Env-A 3212, Env-A 3214, Env-A 808.11, Env-A 808.13

**Table 9: Applicable Reporting Requirements**

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	<p>i) The calibration gas concentration;</p> <p>n. If a gas bottle was changed during the quarter:</p> <p>i) The date of the calibration gas bottle change;</p> <p>ii) The gas bottle concentration before the change; and</p> <p>iii) The gas bottle concentration after the change; and</p> <p>iv) The expiration date for all calibration gas bottles used.</p> <p>o. Excess emissions of SO<sub>2</sub> shall be defined as an annual SO<sub>2</sub> emission, which exceeds the state acid rain emission limitation, as calculated from CEM data.</p> <p>p. The designated representative shall affirm that the component/system identification codes and formulas in the quarterly electronic reports represent current operating conditions.</p> <p>q. The designated representative shall submit a certification in support of each quarterly emissions monitoring report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored.</p> <p>r. The certification shall indicate whether the monitoring data submitted were recorded in accordance with the applicable requirements of this part including the quality control and quality assurance procedures and specifications of 40 CFR 75, and any such requirements, procedures and specifications of an applicable excepted or approved alternative monitoring method.</p> <p>s. For a unit with add-on emission controls, the designated representative shall also include a certification, for all hours where data are substituted following the provisions of 40 CFR 75.34(a)(1), that the add-on emission controls were operating within the range of parameters listed in the monitoring plan and that the substitute values recorded during the quarter do not systematically underestimate SO<sub>2</sub> or NO<sub>x</sub> emissions, pursuant to 40 CFR 75.34.</p> <p>t. For a unit that is reporting on a control period basis, the designated representative shall also include a certification that the NO<sub>x</sub> emission rate and NO<sub>x</sub> concentration values substituted for missing data under 40 CFR 75 Subpart D are calculated using only values from a control period and do not systematically underestimate NO<sub>x</sub> emissions.</p> <p>u. Pursuant to Env-A 3212.15(b), for SRCT, PSNH shall either meet all of the requirements of 40 CFR 75 related to monitoring and reporting NO<sub>x</sub> mass emissions during the entire year or submit quarterly reports only for the periods from the earlier of May 1 or the date and hour that PSNH successfully completes all of the recertification tests required in accordance with 40 CFR 75.74 through September 30 of each year in accordance with 40 CFR 75.74(b).</p> <p>v. Pursuant to Env-A 3212.15(e) and Env-A 2910.11(a)(3), the quarterly reports shall be submitted in the manner specified in 40 CFR 75, Subpart H and 40 CFR 75.64.</p> <p>w. Pursuant to Env-A 3212.15(f) and Env-A 2910.11(a)(4), the quarterly reports shall include all of the data and</p>			

**Table 9: Applicable Reporting Requirements**

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	<p>information required in 40 CFR Subpart H and 40 CFR Subpart G.</p> <p>x. Pursuant to Env-A 3214.01 and Env-A 2911.01, PSNH shall also submit emissions and operations information in electronic format as part of the quarterly reports.</p> <p>y. Pursuant to Env-A 3214.02, PSNH shall also submit to the NETS administrator in the quarterly reports, NO<sub>x</sub> emissions in lb/hr for every hour during the control period and cumulative quarterly and seasonal NO<sub>x</sub> emission data in pounds.</p> <p>z. Pursuant to Env-A 2911.02, PSNH shall also submit to the ETS administrator in the quarterly reports, SO<sub>2</sub>, NO<sub>x</sub> and CO<sub>2</sub> emissions in lb/hr for every hour during the year and cumulative quarterly and annual SO<sub>2</sub>, NO<sub>x</sub> and CO<sub>2</sub> emissions data in pounds.</p>			
28.	<p><u>Offset Plans for Excess SO<sub>2</sub> Emissions:</u> PSNH shall submit an offset plan no later than 60 days after the end of any calendar year during which a unit has excess SO<sub>2</sub> emissions. The offset plan shall contain the information pursuant to 40 CFR 77.3.</p>	60 days after the end of any calendar year	SR5	40 CFR 77.3
29.	<p><u>Quarterly Audit Reports:</u> Pursuant to Env-A 808.07 (new), PSNH shall submit to DES, a written summary report of the results of all required audits that were performed in that quarter, in accordance with the following:</p> <p>a. For gaseous CEM audits, the report format shall conform to that presented in 40 CFR 60, Appendix F, Procedure 1, Section 7; and</p> <p>b. For opacity CEM audits, the report format shall conform to that presented in EPA-600/8-87-025, April 1992, "Technical Assistance Document: Performance Audit Procedures for Opacity Monitors."</p>	Quarterly, no later than 30 calendar days after the end of the quarter for which reporting is required	SR5	Env-A 808.07
30.	<p><u>Quarterly Fuel Data Reports:</u> PSNH shall submit quarterly reports of the fuel data listed in Table 8, item 5 summarized on a monthly basis. PSNH shall also submit quarterly reports containing the monthly fuel usage information by device fuel type and sulfur content.</p>	Quarterly, no later than 30 calendar days after the end of the quarter for which reporting is required	SR5	Env-A 910.01
31.	<p><u>Performance Test Reports:</u> PSNH shall submit a report to DES documenting the results of the compliance stack emission test. The compliance stack emission test report shall contain the following information:</p> <p>a. All the information required for the pre-test protocol as described in Env-A 802.04;</p> <p>b. All test data;</p> <p>c. All calibration data;</p> <p>d. Process data agreed by DES and PSNH to be collected;</p> <p>e. All test results;</p> <p>f. A description of any discrepancies or problems that occurred during testing or sample analysis;</p> <p>g. An explanation of how discrepancies or problems were treated and their effect on the final results; and</p> <p>h. A list and description of all equations used in the test report, including sample calculations for each equation</p>	No later than 60 days after a performance test	SR5	Env-A 802.11

**Table 9: Applicable Reporting Requirements**

Item No.	Reporting Requirement	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	used.			
32.	<u>Net Electrical Output Reporting:</u> PSNH shall report monthly data of the net electrical output of each affected source for the calendar year to the Energy Information Administration and DES.	Annually (no later than April 15 <sup>th</sup> of the following year)	SR5	Env-A 2906.05(g)
33.	<u>Regulated Toxic Air Pollutant Reports:</u> PSNH shall report actual emissions speciated by individual regulated toxic air pollutants, including a breakdown of VOC emission compounds.	Annually (no later than April 15 <sup>th</sup> of the following year)	SR5	Env-A 907.01
34.	<u>Prompt Reporting of Permit Deviations:</u> PSNH shall promptly report deviations from permit requirements by phone, fax or e-mail in accordance with Section XVIII of this permit and Env-A 911 (new).	Within 24 hours of discovery of occurrence	SR5	Env-A 911
35.	<u>Certification by the Designated Representative or the Alternate Designated Representative:</u> Any document submitted under the Acid Rain program shall be signed and certified by the designated representative or the alternate designated representative and include the statements pursuant to 40 CFR 72.21 (a)(1) and (2).	With each submittal	SR5	40 CFR 72.21
36.	<u>Emissions Reporting and Emissions Fees:</u> PSNH shall submit reports of actual emissions of all significant and insignificant activities and payment of emission-based fees in accordance with Env-A 700 and Section XVIII of this permit.	Quarterly	SR5	Env-907.01 and Env-A 704.03 and 704.04
37.	<u>Annual Acid Rain Compliance Certification Report:</u> PSNH shall submit an annual compliance certification report containing all the information required in 40 CFR 72.90(b)	60 days after the end of the calendar year	SR5	40 CFR 72.90
38.	<u>Multipollutant Budget and Trading Program Annual Compliance Certification:</u> TPSNH shall submit an annual compliance certification containing the information listed in Env-A 2913.	By January 30 of each year, beginning in 2007	SR5	Env-A 2913
39.	<u>NOx Budget Program Compliance Certification:</u> For each control period, PSNH shall submit an annual compliance certification containing the information listed in Env-A 3216.	By November 30 of each year	SR5	Env-A 3216
40.	<u>Reporting of Raw Material Usage for Air Pollution Control Equipment:</u> As part of the annual emissions report, PSNH shall report: a. Amount of urea used in the SNCR system on a monthly basis; and b. Amount of limestone injected into the boiler on a monthly basis.	Annually (no later than April 15 <sup>th</sup> of the following year)	SR5-PC1 SR5-PC2	Env-A 910.01

## General Temporary PSD Permit Conditions

### IX. Temporary Permit Renewal Procedures

Pursuant to Env-A 607.02(b), for the reissuance of a temporary permit, an application shall be considered timely if it is received by the department at least 90 days prior to the designated expiration date of the temporary permit.

**X. Application Shield**

- A. Pursuant to Env-A 607.10(a), if an applicant submits a timely application that has been deemed complete by the department for the reissuance of a temporary permit or the issuance of an initial state permit to operate, the failure to have a current and valid temporary permit shall not be considered a violation of RSA 125-C:11, I or Env-A 607.01 unless and until the department takes final action on the application by denying the requested reissuance of a temporary permit or issuance of a state permit to operate.
- B. Pursuant to Env-A 607.10(b), if the department deems an application complete, but requests additional information pursuant to Env-A 607.06(b), the protection granted in Env-A 607.10(a) shall cease to apply when the applicant fails to submit in writing such additional requested information by the deadline specified in the request.

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**XI. Permit Shield**

Pursuant to Env-A 607.08(c), the expiration of a temporary permit shall terminate the owner or operator's right to construct or operate a new or modified source or device pursuant to the permit, unless a timely and complete application for a state permit to operate, title V operating permit, or an amendment thereto, has been received by the department. Upon the submittal of a timely and complete application for any of the foregoing permits, the right to construct shall continue, under the terms and conditions of the expired temporary permit, pending the department's decision on the application.

**XII. Administrative Permit Amendments**

- A. Pursuant to Env-A 612.01, PSNH may implement the changes addressed in the request for an administrative permit amendment as defined in Part Env-A 100 immediately upon submittal of the request.
- B. Pursuant to Env-A 612.01, the Director shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

**XIII. Minor Permit Amendments**

- A. Pursuant to Env-A 612.05 prior to implementing a minor permit modification, PSNH shall submit a written request to the Director in accordance with the requirements of Env-A 612.05(b).
- B. The Director shall take final action on the minor permit amendment request in accordance with the provisions of Env-A 612.05(c) through (g).
- C. Pursuant to Env-A 612.05(g), the permit shield specified in Env-A 609.09 shall not apply to minor permit amendments under Section XVII. of this Permit.
- D. Pursuant to Env-A 612.05(a), PSNH shall be subject to the provisions of RSA 125-C:15 if the change is made prior to the filing with the Director a request for a minor permit amendment.

**XIV. Significant Permit Amendments**

- A. Pursuant to Env-A 612.06, a change at the facility shall qualify as a significant permit amendment if it meets the criteria specified in Env-A 612.06(a)(1) through (5).
- B. Prior to implementing the significant permit amendment, PSNH shall submit a written request to the Director which includes all the information as referenced in Env-A 612.06(b) and (c) and shall be issued an amended Temporary PSD Permit from the DES. PSNH shall be subject to the provisions of RSA 125-C:15 if a request for a significant permit amendment is not filed with the Director and/or the change is made prior to the issuance of an amended Temporary PSD Permit.
- C. The Director shall take final action on the significant permit amendment in accordance with the Procedures specified in Env-A 612.06(d), (e) and (f).

**XV. Temporary PSD Permit Suspension, Revocation or Nullification**

- A. Pursuant to RSA 125-C:13, the Director may suspend or revoke any final permit issued hereunder if, following a hearing, the Director determines that:
1. PSNH has committed a violation of any applicable statute or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, order or permit condition in force and applicable to it; or
  2. The emissions from any device to which this Permit applies, alone or in conjunction with other sources of the same pollutants, presents an immediate danger to the public health.
- B. The Director shall nullify any Permit, if following a hearing in accordance with RSA 541-A:30, II, a finding is made that the Permit was issued in whole or in part based upon any information proven to be intentionally false or misleading.

**XVI. Inspection and Entry**

EPA and DES personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6,VII, for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the NH Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

**XVII. Reports**

All reports submitted to DES (except those submitted as emission based fees as outlined in Section XVIII of this Permit) shall be submitted to the following address:

New Hampshire Department of Environmental Services  
Air Resources Division  
29 Hazen Drive  
P.O. Box 95  
Concord, NH 03302-0095

ATTN: Section Supervisor, Compliance Bureau

All reports submitted to EPA shall be submitted to the following address:

Office of Environmental Stewardship  
Director Air Compliance Program  
United States Environmental Protection Agency  
1 Congress Street  
Suite 1100 (SEA)  
Boston, MA 02114-2023  
ATTN: Air Compliance Clerk

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**XVIII. Emission-Based Fee Requirements**

- A.** PSNH shall pay an emission-based fee quarterly for this facility as calculated each calendar year pursuant to Env-A 705.03.
- B.** PSNH shall determine the total actual quarterly emissions from the facility to be included in the emission-based multiplier specified in Env-A 705.03(a) for each calendar quarter in accordance with the methods specified in Env-A 616.
- C.** PSNH shall calculate the quarterly emission-based fee for each calendar year in accordance with

$$FEE = E * DPT * CPI_m * ISF$$

the procedures specified in Env-A 705.03 and the following equation:

Where:

FEE = The quarterly emission-based fee for each calendar quarter as specified in Env-A 704.

E = The emission-based multiplier is based on the calculation of total quarterly emissions as specified in Env-A 705.02 and the provisions specified in Env-A 705.03(a).

DPT = The dollar per ton fee the DES has specified in Env-A 705.03(b).

CPI<sub>m</sub> = The Consumer Price Index Multiplier as calculated in Env-A 705.03(c).

ISF = The Inventory Stabilization Factor as specified in Env-A 705.03(d).

- D.** PSNH shall contact the DES each calendar year for the value of the Inventory Stabilization Factor.
- E.** PSNH shall contact the DES each calendar year for the value of the Consumer Price Index Multiplier.
- F.** PSNH shall submit, to the DES, payment of the emission-based fee and a summary of the calculations referenced in Sections XVIII.B. and C of this Permit for each calendar quarter. The total emission-based fee shall be paid in four equal installments on a quarterly basis. The quarterly payments shall be made in accordance with Env-A 705.04 on the 15<sup>th</sup> day of the following months:
  - 1. July of the year to which the fee applies (e.g., fees for emissions occurring during January, February, March 2002 are due July 15, 2003);

2. October of the year to which the fee applies (e.g., fees for emissions occurring during April, May, June 2002 are due on October 15, 2003);
3. January of the following year (e.g., fees for emissions occurring during July, August, September 2002 are due on January 15, 2004);
4. April of the following year (e.g., fees for emissions occurring during October, November, December 2002 are due on April 15, 2004).

**G.** PSNH shall pay any remaining balance of the total emission-based fee for the year no later than April 15<sup>th</sup> of the following year.

The emission-based fee and summary of the calculations shall be submitted to the following address:

New Hampshire Department of Environmental Services  
Air Resources Division  
29 Hazen Drive  
P.O. Box 95  
Concord, NH 03302-0095  
ATTN.: Emissions Inventory

**H.** The DES shall notify PSNH of any under payments or over payments of the annual emission-based fee in accordance with Env-A 705.05.

## **XIX. Permit Deviation**

**A.** In the event of a permit deviation, PSNH shall:

1. Investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels; and
2. Record the following information:
  - a. The permit deviation;
  - b. The probable cause of the permit deviation;
  - c. The date of the occurrence;
  - d. The duration;
  - e. The specific device that contributed to the permit deviation; and
  - f. Any corrective or preventative measures taken.
3. If the permit deviation does not cause excess emissions, but continues for a period greater than 9 consecutive days, the source shall notify the division by telephone or fax on the tenth day of the permit deviation, unless it is a Saturday, Sunday, or state or federal legal holiday, in which event, the division shall be notified on the next day which is not a Saturday, Sunday, or state or federal legal holiday, of the subsequent corrective actions to be taken.
4. In the event of a permit deviation that causes excess emissions, the owner or operator of the affected device, process, or air pollution control equipment shall:

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- a. Notify the division of the permit deviation and excess emissions by telephone or fax, within twenty-four (24) hours of discovery of the permit deviation, unless it is a Saturday, Sunday, or state or federal legal holiday, in which event, the division shall be notified on the next day which is not a Saturday, Sunday, or state or federal legal holiday; and
  - b. Submit a written report, in accordance with (A)(6) below, to the division within ten (10) days of discovery of the permit deviation reported in (A)(4)(a), above.
5. In the event of a permit deviation caused by a failure to comply with the data availability requirements of Env-A 800, the owner or operator of the source shall:
- a. Notify the division of the permit deviation by telephone or fax, within 10 days of discovery of the permit deviation; and
  - b. Report the permit deviation to the division, as part of the excess emissions report submitted in accordance with Env-A 800.
6. The written report, pursuant to (A)(4)(b) above, shall include the following information:
- a. Facility name;
  - b. Facility address;
  - c. Name of the responsible official employed at the facility;
  - d. Facility telephone number;
  - e. Date(s) of the occurrence;
  - f. Time of the occurrence;
  - g. Description of the permit deviation;
  - h. The probable cause of the permit deviation;
  - i. Corrective action taken to date;
  - j. Preventative measures taken to prevent future occurrences; and
  - k. Date and time that the device, process, or air pollution control equipment returned to operation in compliance with an enforceable emission limitation, or operating condition;
  - l. The specific device, process or air pollution control equipment that contributed to the permit deviation;
  - m. The type and quantity of excess emissions emitted to the atmosphere due to the permit deviation; and
  - n. The calculation or estimation used to quantify the excess emissions.

**B.** In accordance with 40 CFR Part 70.6(a)(3)(iii)(A), sources subject to Env-A 609 that have been issued a title V permit, shall report to the division, at a reporting frequency no less stringent than semi-annually, the following information:

1. A summary of all permit deviations previously reported to the division pursuant to Env-A 911.04(a) and (b), for the reporting period;
2. A list of all permit deviations recorded pursuant to Env-A 911.03(b).

**C.** Sources subject to Env-A 607, Env-A 608, or Env-A 609 that have not been issued a title V permit, but have been issued a state permit to operate or a temporary permit, shall report to the division, at least annually by April 15, all information pursuant to (B) above.

**XX. Ozone Season NOx Budget Trading Program (Env-A 3200)**

Pursuant to Env-A 3202.01, if fossil fuel comprises 51% or greater of the annual heat input on a BTU basis, then the NWPP Boiler will be classified as a NOx Budget Source and will be subject to the requirements of Env-A 3200.

**XXI. Discrete Emission Reduction Trading Program (Env-A 3100)**

To date, PSNH did not file a notice of generation of Discrete Emissions Reductions (DERs) in accordance with Env-A 3100 nor a request for Emissions Reductions Credits (ERCs) in accordance with Env-A 3000. At this point, DES has not included any permit terms authorizing emissions trading in this permit. All emission reduction trading must be authorized under the applicable requirements of either Env-A 3000 *Emissions Reductions Credits Trading Program*, or Env-A 3100 *Discrete Emissions Reductions Trading Program* and 42A USC § 7401 et seq. (The "Act"), and must be provided for in this permit.